SAMARCO MINERAÇÃO S.A.

FINANCIAL STATEMENTS AT DECEMBER 31, 2018 AND 2017
AND INDEPENDENT AUDITORS' REPORT

(Free-translation of an original version issued in Portuguese)

SAMARCO

SAMARCO MINERAÇÃO S.A.

MESSAGE FROM MANAGEMENT

MESSAGE FROM MANAGEMENT

Samarco management hereby presents the financial statements and related notes of the company for the fiscal year ended December 31, 2018, including complementary information and clarifications.

In operation for 41 years, Samarco Mineração S.A. is a closely-held Brazilian mining company, controlled in equal parts by two shareholders - BHP Billiton Brasil Ltda. ("BHP Billiton Brasil") and Vale S.A. ("Vale"). The company's trajectory was marked by the failure of the Fundão tailings dam in Mariana (MG) on November 5, 2015, an event which impacted communities and the environment along the Doce river basin in the states of Minas Gerais and Espirito Santo. Since that date, Samarco, which had for many years been one of Brazil´s major exporters, has shut down its operations.

In the last three years, the two shareholders provided R$ 6.93 billion in resources, of which R$ 2.01 billion were allocated to the Company's working capital needs and R$ 4.92 billion to environmental and social actions of remediation and compensation until the end of 2018. In 2019 Vale and BHP Billiton Brasil also announced their commitment to supply additional financing, in the form of a loan, of some US$ 163 million to support Samarco's activities for the first semester of 2019.

Based on its experience and lessons learned, Samarco is now focusing its efforts on the future resumption of its activities, in a responsible manner, with utmost safety and with the support of the communities. All actions are integrated and aligned with its remediation and compensation efforts, which are under the responsibility of the Renova Foundation, a private and autonomous institution which started its activities in August 2016, having been created as part of the so-called Framework Agreement ("TTAC"), signed in March 2016. The TTAC was subsequently validated in August 2018, in accordance with the Term of Adjustment of Conduct Governance (" Governance TAC"), which expanded the participation of the affected population in the remediation process.

The TTAC established 42 socio-environmental and socio-economic programs, and Samarco is responsible for funding Renova Foundation for the effective term of said agreement. Until December 31, 2018, R$ 5.26 billion had been allocated to these programs, and in December 2018, Samarco made a provision for an aggregate amount of R$ 9,6 billion for future disbursements related to its obligations arising from the failure of the Fundão dam. The scope, timeframe, and estimated costs of remediation programs are an estimate and therefore subject to change, since they depend on completion of studies, action plans, review of the programs, and also on the outcome of pending legal proceedings.

In recent years, remediation actions have advanced. About R$ 596 million were paid in indemnities and financial aid in 2018, from a cumulative amount of R$ 1.3 billion, already allocated to the monthly grant of emergency financial assistance to almost 27 thousand people and to more than 273 thousand indemnities and provided R$ 30 million to the Rio Doce Development Fund to finance micro e medium sized businesses. The Foundation's budget for 2019 is of the order of R$ 2.94 billion.

In parallel with its remediation activities, Samarco has dedicated special attention to the reinforcement of its geotechnical structures, meeting not only Brazilian standards, but also international safety requirements. With an investment of approximately R$ 360 million until December 31, 2018, robust engineering works were carried out to reinforce the structures, following recommendations of independent audits.

The Samarco Integrated Security System has the support of its Monitoring and Inspection Center (CMI), which operates 24 hours a day, seven days a week and has more than 600 state-of-the-art items of equipment for the control and monitoring of geotechnical structures. This involves investments to allow Samarco to detect any millimetric change in its geotechnical structures. The monitoring is performed by a specialized team, composed of engineers and trained technicians, and includes geotechnical inspection in the field. These actions are complemented by emergency drills, which have brought together some 3,500 people in seven prevention exercises, as well as by the installation of sirens in dams and in neighboring communities, which are tested monthly.

As proof of the efficiency of this integrated system, on March 28, 2019 Samarco received the Stability Certificate for the company's geotechnical structures from the audit firm. It should be noted that, at Samarco, the Chief Executive Officer signs off on all dam stability reports jointly with the independent experts.

Currently, Samarco is defining the bases for the conceptual design for closure of the Germano dam, in compliance with the revised standards of the National Mining Agency (ANM) and the Brazilian Association of Technical Standards (ABNT). It is important to emphasize that the company has been carrying out improvements on all its geotechnical structures since 2015.

In addition to the investments in safety and in environmental and social compensation and remediation, Samarco has been investing in care maintenance and operational readiness plan that assures the adequate maintenance and conservation of its production assets, preparing them for resumption of operations. An amount of approximately R$ 2,1 billion were allocated since Fundão dam rupture until December 2018 to actions such as: assembly of the mine bench conveyor system, repair of the ball mill of concentrator 3, running an instrumented PIG (device for inspection, cleaning and maintenance) through pipeline 2, and interventions in the fourth pellet plant, besides several other activities that guarantees the integrity of Samarco assets.

Samarco is working toward the gradual resumption of its operations, initially planned at 26% of production capacity. New technologies will be used that assure greater safety and lower environmental impact, such as disposal of the tailings in the Alegria Sul pit, a confined structure which started being prepared for this purpose in October 2018, and a filtration system, which represents an innovation in the treatment of tailings.

The filtration system will allow the processing of the sandy tailings, which correspond to 80% of the total volume of tailings generated, and their disposal in stacks. This technology allows the extracted water to be reused in the Company's operational and production processes, reducing the need for external abstraction and increasing water efficiency.

In mid-April Samarco reached the milestone of 66,5% completion of the preparing the Alegria Sul pit to receive tailings . To reach this milestone 400 people were directly engaged in the project, several mining heavy equipments, adding up to 48 thousand operating hours, as well as smaller machines for support services and infrastructure, totaling an investment of R$ 48 million.

Samarco believes that its operational restart represents an important contribution to the economic development not only of the states of Espírito Santo and Minas Gerais, but of the country as a whole. Up to 2015, the company ranked second in the seaborne market of iron ore pellets, with an annual production capacity of 31.5 million tons, enjoying global recognition with customers in more than 21 countries. At the time, the mining company had more than six thousand direct and indirect employees. Currently, it has approximately 1,180 direct and approximately 1,800 indirect employees, a reduction that directly impacts the income generation of municipalities, states and country. The company's revenue prior to the dam failure amounted to 1.5% of Minas Gerais GDP and 6.4% of Espírito Santo GDP.

In addition to preparing the Alegria Sul pit to receive tailings, Samarco, in order to be able to resume production, also needs the issue of the Corrective Operational License (LOC) for the Germano Complex. This license, initially applied for in September 2017, aims to rectify the licenses suspended in October 2016 by the State Environmental Agency ("SEMAD"). After initial review, the permitting process was forwarded to the Brazilian Institute of Environment and Natural Renewable Resources (IBAMA). The proposal presented by Samarco complies with criteria established by law and has already been approved by the Chamber of Biodiversity Protection of SEMAD.

Another part of the licensing process, related to the use of water resources, requires a water use license from the Minas Gerais Water Management Institute (IGAM). To this end, the Company has already obtained the approval of the Piracicaba River Basin Committee (CBH) to lower the groundwater level.

In addition to obtaining the necessary authorizations, we also believe that the restart must prioritize safety, be economically viable and have the support of the communities and the publics with which Samarco has relationships.

The resumption of operations will require funding and an adequate restructuring of our financial obligations, such as the debts under negotiation with our creditors, corresponding to some US$ 3.8 billion. Samarco clarifies that no consensual agreement has yet been reached and that it will resume negotiations in a timely manner. The documentation related to this process is available on the company's website (https://www.samarco.com/investidores/).

Regarding the financial statements contained in this document, Samarco reiterates that the expectations presented are forward-looking statements, which are forecasts and not assurances of any future performance. Any forward-looking statements are and will be subject to the risks, uncertainties and factors relating to the failure of the Fundão dam, Samarco's operations and business scenarios, which may cause actual results to be materially different.

The statements contained in this document were based on a number of assumptions including the resumption of operations, which, however, remains subject to several factors related to the licensing process. As a consequence, or as a result of other factors not mentioned herein, the resumption of operations has no defined date and will be subject to financial risks and uncertainties.

We at Samarco thank all our stakeholders for the support we have received during this period. We remain focused and concentrate our efforts on environmental and social compensation and remediation activities and on seeking a safe and sustainable resumption of our operations, in line with our values and guidelines.

Rodrigo Alvarenga Vilela
CEO and Operations and Infrastructure Officer

Cristina Morgan Cavalcanti
CFO

SAMARCO MINERAÇÃO S.A.

INDEPENDENT AUDITOR'S REPORT
ON PARENT COMPANY AND CONSOLIDATED FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT ON THE INDIVIDUAL AND CONSOLIDATED FINANCIAL STATEMENTS

To the shareholders of Samarco Mineração S.A.
Belo Horizonte - MG

Opinion

We have audited the individual and consolidated financial statements of the company Samarco Mineração S.A.("Company"), identified as parent company and consolidated respectively, which comprise the statement of financial position as at December 31, 2018 and the related statements of income, the comprehensive statements of income, the statement of changes in shareholders' equity and statements of cash flows for the year then ended, including significant accounting policies and other explanatory information.

In our opinion, the aforementioned financial statements present fairly, in all material respects, the individual and consolidated financial and equity position of Samarco Mineração S.A. as of December 31, 2018, and the individual and consolidated performance of its operations and individual and consolidated cash flows for the financial year then ended, in conformity with accounting practices adopted in Brazil.

Basis for opinion

We conducted our audit in accordance with Brazilian and international auditing standards. Our responsibilities under those standards are further described in the section Auditors' Responsibilities for the Audit of the individual and consolidated financial statements. We are independent of the Company and its subsidiary in accordance with the ethical requirements set out in the Professional Code of Ethics for Accountants and the Professional Standards issued by the Federal Accounting Council, and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Material uncertainty regarding going concern

We draw your attention to note 2 to the financial statements, which states that the Company and its subsidiary have had their activities suspended due to the collapse of Fundão dam on November 5, 2015. As a result of this accident, the consolidated statement of financial position as of December 31, 2018 presents negative equity of R$ 17,116,614 thousand, the current liabilities exceed the current assets by R$ 23,292,630 thousand and the consolidated statement of cash flows for the financial year then ended presents negative cash generation from operating activities of R$ 870,289 thousand. Coupled with the fact that in order to resume operating the Company and its subsidiary require approval of the licensing process for the tailings pit (Corrective Operating License - LOC) submitted to the Minas Gerais Sustainable Development and Environmental Office (SEMAD) in 2016, these events and conditions create material uncertainty that could pose substantial doubt on the capacity of the Company and its subsidiary to continue as going concerns. A number of judicial and administrative proceedings are also in progress regarding civil, labor and environmental matters related to the dam collapse. Because of this, the Company and its subsidiary signed a Transaction and Conduct Adjustment Agreement (TTAC) to determine the measures actions to remedy and compensate the socioeconomic and environmental damages. To implement the TTAC Agreement, the Company and its shareholders set up a Foundation to develop and implement environmental and socioeconomic programs to remedy and compensate the damage caused by the collapse of the Fundão dam. The Company and its subsidiary are relying on the financial support of their shareholders to honor ordinary obligations until they can resume operating. Our opinion is not qualified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the individual and consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Environmental and socioeconomic provision for remedying the damage caused by the collapse of the Fundão tailings dam	
See Notes 1(a) and 3 to the individual and consolidated financial statements	
Key audit matter	**How the matter was addressed in our audit**
Following the collapse of the Fundão tailings dam in Mariana-MG on November 5, 2015, the Company and its subsidiary had their operations suspended and since the accident the Company has incurred material expenses in order to prevent the impacts from worsening and to remedy and compensate for the material, environmental and social economic damages. The Company also recognized the writeoff of its assets affected by the accident and recorded provisions based on estimated future expenses. The provision for future expenses resulting from the accident was based on the estimated contributions to be made to Fundação Renova, following the signing of the Transaction and Conduct Adjustment Agreement - TTAC. This Foundation carries out environmental and socioeconomic recuperation and compensation programs. The provision initially resulted from internal estimates and support from specialized independent consultants contracted for this purpose, and are updated based on changes in the estimated amount that Fundação Renova will spend on delivering the programs. The Company's provision also includes estimated internal expenses related to the accident not related to Fundação Renova and its programs. As there is significant uncertainty around the amounts the Company will pay to deliver Fundação Renova's programs and other expenses resulting from the dam collapse due to the possibility of changes in assumptions, the lack of precedent and reliance on several factors not exclusively under the Company's control, the provisions made at December 31, 2018 required material judgment by management. There are also administrative and judicial proceedings (including public civil actions) filed against the Company related to the collapse of the Fundão dam. Significant judgment is required to assess the risks posed by these cases which could result in material impacts on the amount recognized in the individual and consolidated financial statements. Due to the materiality of the amounts involved and the complexity and judgments involved in assessing and measuring the socio-environmental and socioeconomic provision, this matter required material attention and was deemed a key audit matter.	As part of our audit we carried out the following procedures, amongst others: We assessed the design and implementation of material internal controls related to approving the budget estimates of Fundação Renova that serve as a basis for the socio-environmental and socioeconomic provision and updated the other assumptions made when calculating this provision. We obtained the breakdown of Fundação Renova's budget by program as of December 31, 2018. This budget establishes a provision for environmental and socioeconomic recuperation and compensation, and we compared this breakdown against the terms established in the Transaction and Conduct Adjustment Agreement - TTAC, in order to check whether a provision exists for each program. For changes deemed material when estimating the provision, we obtained the underlying data of the assumptions used to review the estimates in order to increase or decrease the provision. Our procedures included confirmations of balances and costs incurred by Fundação Renova. We also used our corporate finance experts in our revision of estimates to review the methodology used to calculate the present value of the obligations, including interest and inflation rates used in the provision's financial calculation. We obtained reports prepared by Company management regarding the administrative and judicial proceedings and public civil actions, and for material proceedings we compared them against the confirmations obtained from the Company's legal advisers. We also brought in our legal experts to review the material public civil actions related to the dam collapse, in order to ascertain, by using information provided by management, whether certain claims made in the proceedings filed against the Company had already been resolved in the settlements made by the Company. We read the information disclosed in the notes to the financial statements. Based on the evidence obtained through the aforesaid procedures, we consider the socioenvironmental and socioeconomic provisions and respective disclosures made within the context of the individual and consolidated financial statements taken as a whole are acceptable.

Property, plant and equipment impairment testing

See Note 12.1 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
Due to the suspension of the Company's operations in Mariana, following the collapse of the Fundão tailings dam, management's assessments on the impairment of its property, plant and equipment found that its assets may be understated. To determine the recoverable value, the Company uses the discounted cash flow method based on economic and financial projections requiring a high degree of judgment in determining the estimates used to project the cash generating unit's cash generation in order to determine the assets' recoverable value. The use of different assumptions could result in significant changes to the findings determined by the Company in its cash flow projections. Because the balances are material and any changes to the assumptions made could materially impact the financial statements, we consider this to be a key audit matter.	As an audit response, we carried out the following procedures, amongst others: We assessed the performance and implementation of the internal controls related to preparing and reviewing the business plan which formed the basis for our impairment analysis. We involved our corporate finance specialists to recalculate the projections and assess the models and core assumptions used in the future cash flow projections. When assessing the assumptions made by management in the projections presented, we primarily considered the time estimated to resume operations and market projections of exchange rates, market projections of iron ore pellet prices, the estimated sales volume, useful life of assets, growth in costs and the consistency of these variables in the projections prepared by Company management. We also read the information disclosed in the notes to the financial statements. Based on the evidence obtained through the aforesaid procedures, we consider the recoverable values of property, plant and equipment and respective disclosures within the context of the individual and consolidated financial statements taken as a whole to be acceptable.

Realization of deferred income tax

See Note 28 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
Since the collapse of the Fundão dam and consequent stoppage of its operations, the Company has been carrying forward tax losses. Given the current situation, it is Management's opinion that the Company is unable to generate sufficient future taxable earnings to use the asset within a reasonable term and has not recognized the deferred asset arising out of said tax losses. The deferred income tax asset not recognized in the financial statements resulting from accumulated tax losses is R$ 2,592,281 thousand as of December 31, 2018. In the financial year the Company maintains a balance of deferred income tax assets resulting from temporarily non-deductible provisions (temporary additions in the income tax calculation). However, the portion of deferred income tax asset resulting from temporary additions related to the socioenvironmental and socioeconomic provision	As an audit response, we carried out the following procedures, amongst others: We involved our tax experts to help us recalculate the tax losses and temporary differences, including rates in force in each tax arrangement applicable to Samarco. In our analyses we assessed the capacity to use the tax loss by offsetting against the temporary exclusions when calculating the income tax as of December 31, 2018 and expected realization in future years, in addition to using tax losses resulting from the generation of future taxable earnings. We also tested the projections presented by management, carrying out the audit procedures described above in the PAA "Property, plant and equipment impairment testing".

>> TO BE CONTINUED

>> TO BE CONTINUED

>> CONTINUATION

>> CONTINUATION

and unrealized exchange variance of R$ 3,347,159 thousand and R$ 574,423 thousand respectively, are not recognized. The financial statements therefore present a net balance of the consolidated deferred income tax liability of R$ 2,268,024 thousand as of December 31, 2018. As these are material amounts, whose realization analysis requires material judgment and use of subjective assumptions to determine the future taxable earnings projections, including in respect of the term for the Company to resume operating, we consider this area to be a key audit matter.	In the course of our audit, we identified internal control deficiencies and immaterial adjustments, which had not been recorded by Management. We read the information disclosed in the notes to the financial statements. Based on the evidence obtained through the aforesaid procedures, we consider the recoverable values of deferred tax assets and their respective disclosures within the context of the individual and consolidated financial statements taken as a whole to be acceptable for the financial year ended December 31, 2018.

Provision for contingencies

See Note 19 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
The recognition and measurement of the Provisions and disclosure of contingent liabilities for civil, labor and above all tax judicial and administrative proceedings requires Company judgment to determine the existence of a present obligation and the likelihood that an outflow of funds will be required to settle the obligation. Significant judgment is required to assess the risks posed by these cases which could result in material impacts on the amount recognized in the individual and consolidated financial statements. Due to the materiality, complexity and judgment involved in assessing and measuring the Provisions and Contingent Liabilities, we consider this area to be a key audit matter.	As an audit response, we carried out the following procedures, amongst others: We obtained the list of judicial and administrative proceedings to which the Company is party, the Company's assessment of the measurement and probability that an outflow of funds will be necessary to settle the obligation, and the assessment of the Company's independent advisers of the measurement and risk of defeat. Based on this information we assessed the criteria used by the Company to recognize, and disclose the Provisions and contingent liabilities, in addition to the adequacy thereof, taking into account the assessments made by the Company and its subsidiary's internal and independent legal advisers and historical information. With the help of our legal experts we assessed the Company's criteria to support the analyses and amounts attributed to certain proceedings we deemed material. On a sample basis, we also recalculated and compared the monetary restatement of liabilities recorded and judicial deposits in place up to the reporting date. We lastly analyzed the Company's disclosures in its financial statements regarding information about the nature, exposure and size of risks posed by the main proceedings involving the Company and its subsidiary. Based on the evidence obtained through the aforesaid procedures, we consider the provisions for contingencies and contingent liabilities and respective recognition disclosures made within the context of the individual and consolidated financial statements taken as a whole to be acceptable.

Emphasis of matter paragraph - Subsequent events
We draw your attention to note 33 to the financial statements which states that by way of Resolution 2,762 on January 29, 2019 the Minas Gerais Sustainable Development and Environmental Office ("SEMAD") addressed the suspension of the environmental regularization analyses in progress regarding the activity of disposing of tailings in dams regardless of the construction method, until the respective authorities have published the new rules. On March 21, 2019, as a supplement of Resolution 2,762, the Joint Resolution of SEMAD/FEAM 2,784 was published and it determines the removal of the required three-year period to all tailings and waste dams raised through the upstream method as part of its mineral activities. The company is evaluating the possible impacts of these resolutions on the Corrective Operational Licensing (LOC) processes for the tailings disposal system in the Alegria Sul pit and on its business plans. Our opinion is not qualified in respect of this matter.

Other matters

Statements of value added
The individual and consolidated statements of added value (DVA) for the financial year ended December 31, 2018, which are the responsibility of Company Management and are not required to be published by privately held companies, were subject to audit procedures conducted in conjunction with the audit of the Company's financial statements. To form our opinion we evaluated whether the statements have been reconciled against the financial statements and accounting records, as applicable, and whether their form and content comply with the criteria set out in CPC Technical Pronouncement 09 - Statements of Added Value. In our opinion, these statements of added value have been adequately prepared, in all material respects, in accordance with this Technical Pronouncement and are consistent with the individual and consolidated financial statements taken as a whole.

Audit of the prior year's financial statements
The individual and consolidated statements of financial position as of December 31, 2017 and the individual and consolidated statements of income, comprehensive statements of income, statement of changes in equity and statements of cash flows and respective notes to the financial statements for the financial year then ended were previously audited by other independent auditors, who issued an unmodified report dated October 9, 2018. The corresponding amounts relating to the individual consolidated statements of added value (DVA) for the financial year ended December 31, 2017 was submitted to the same audit procedures by said independent auditors, who issued an unmodified report based on this examination.

Other information accompanying the individual and consolidated financial statements and auditor's report
Management is responsible for the other information. The other information comprises the Management Report.

Our opinion on the individual and consolidated financial statements does not cover the Management Report and we do not express any form of audit conclusion thereon.

In connection with our audit of the individual and consolidated financial statements, our responsibility is to read the Management Report and, in doing so, consider whether the report is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work that we have performed, we conclude that there is a material misstatement of this Management Report, then we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the individual and consolidated financial statements
Management is responsible for the preparation and fair presentation of the individual and consolidated financial statements in accordance with the accounting practices adopted in Brazil, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the individual and consolidated interim financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company and its subsidiary or to cease operations, or has no realistic alternative but to do so.

Those charged with the governance of the Company and its subsidiary are responsible for overseeing the financial reporting process.

Auditors' responsibilities for the audit of the individual and consolidated financial statements
Our objectives are to obtain reasonable assurance about whether the individual and consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. 'Reasonable assurance' is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Brazilian auditing standards and ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence

the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Brazilian auditing standards and ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the individual and consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company and its subsidiary' internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company and its subsidiary's ability to continue as a going concern. If we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the individual and consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company and its subsidiary to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the individual and consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the individual and consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Belo Horizonte, May 13, 2019.

KPMG Auditores Independentes
CRC SP-014428/O-6 F-MG

Free-translation of an original version issued in Portuguese

Marco Túlio Fernandes Ferreira
Accountant CRC MG-058176/O-0

BALANCE SHEET

At December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
Assets	**Note**	**2018**	**2017**	**2018**	**2017**
Current					
Cash and cash equivalents	4	79,981	55,568	82,322	57,473
Restricted short-term investments	5	1,919	1,130	1,919	1,130
Accounts receivable	6	7,654	17,143	6,093	15,813
Inventory	7	14,166	8,688	14,166	8,688
Recoverable taxes	8	80,552	85,874	80,554	85,874
Prepaid expenses		1,457	11,517	1,510	11,636
Advances to suppliers		5,653	1,929	5,653	1,929
Other assets	9	17,709	37,186	17,777	37,187
Total current assets		**209,091**	**219,035**	**209,994**	**219,730**
Noncurrent					
Court deposits	19	1,849,787	1,772,305	1,849,787	1,772,305
Recoverable taxes	8	76,741	76,688	76,741	76,689
Inventory	7	396,341	348,124	396,341	348,124
Advances to suppliers	11	44,085	44,085	44,085	44,085
Other assets	9	16,747	18,356	16,942	18,538
		2,383,701	**2,259,558**	**2,383,896**	**2,259,741**
Investments	10	18,136	14,942	-	-
Property, plant and equipment	12	20,154,663	17,576,106	20,154,705	17,576,266
Intangible assets	13	231,526	80,822	231,526	80,822
Total noncurrent assets		**22,788,026**	**19,931,428**	**22,770,127**	**19,916,829**
Total assets		**22,997,117**	**20,150,463**	**22,980,121**	**20,136,559**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

BALANCE SHEET
At December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
Liabilities	**Note**	**2018**	**2017**	**2018**	**2017**
Current					
Trade payables	14	76,439	42,805	76,455	42,825
Loans and financing	15	18,530,227	15,176,001	18,530,227	15,176,001
Financial charges payable	15	1,844,328	1,005,279	1,844,328	1,005,279
Payroll, provisions and social contributions	17	21,302	21,410	21,418	21,473
Taxes payable	18	240,199	169,966	240,237	170,071
Provision for income tax	28	-	-	143	104
Other provisions	20	2,753,486	1,738,352	2,753,486	1,738,352
Other liabilities	21	53,433	47,451	36,330	33,360
Total current liabilities		**23,519,414**	**18,201,264**	**23,502,624**	**18,187,465**
Noncurrent					
Taxes payable	18	201,047	193,657	201,047	193,657
Dividends	22	2,805,548	2,805,548	2,805,548	2,805,548
Provisions for contingencies	19	113,526	123,455	113,526	123,455
Deferred income tax	28	2,268,230	1,597,310	2,268,024	1,597,205
Other provisions	20	7,280,863	9,979,503	7,280,863	9,979,503
Other liabilities – Related parties	11	3,848,499	1,757,488	3,848,499	1,757,488
Other liabilities	21	76,604	95,233	76,604	95,233
Total noncurrent liabilities		**16,594,317**	**16,552,194**	**16,594,111**	**16,552,089**
Equity	22				
Capital		297,025	297,025	297,025	297,025
Capital reserves		2,476	2,476	2,476	2,476
Carrying value adjustments		1,622,734	1,659,245	1,622,734	1,659,245
Accumulated losses		(19,038,849)	(16,561,741)	(19,038,849)	(16,561,741)
Total stockholders' equity		**(17,116,614)**	**(14,602,995)**	**(17,116,614)**	**(14,602,995)**
Total liabilities and stockholders' equity		**22,997,117**	**20,150,463**	**22,980,121**	**20,136,559**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF OPERATIONS
Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2018	2017	2018	2017
Revenue	23	104,887	78,905	104,887	78,905
Cost of goods sold and services rendered	24	(680,793)	(815,291)	(680,754)	(815,260)
Gross profit (loss)		**(575,906)**	**(736,386)**	**(575,867)**	**(736,355)**
Operating expenses					
Selling	25	(40,457)	(70,919)	(38,877)	(70,303)
General and administrative	25	(55,435)	(56,025)	(55,435)	(56,025)
Other operating (expenses) income, net	26	699,448	(4,991,434)	698,485	(4,991,539)
Equity in results of investees	10	595	539	-	-
(Loss) before finance result		**28,245**	**(5,854,225)**	**28,306**	**(5,854,222)**
Finance result					
Finance income	27	91,257	139,395	91,260	139,399
Finance expenses	27	(2,342,228)	(1,665,846)	(2,342,233)	(1,665,779)
Net foreign exchange gains/losses	27	412,568	13,627	412,563	13,631
(Loss) before taxation		**(1,810,158)**	**(7,367,049)**	**(1,810,104)**	**(7,366,971)**
Deferred income tax	28	(666,950)	(290,781)	(667,004)	(290,859)
(Loss) for the year		**(2,477,108)**	**(7,657,830)**	**(2,477,108)**	**(7,657,830)**
Loss for the year per share – basic and diluted				**(472,43)**	**(1,460,50)**
Quantity of shares at end of year	22			**5,243,298**	**5,243,298**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF COMPREHENSIVE INCOME (LOSS)

Year ended December 31 – In thousands of Reais – R$

	Parent Company and Consolidated	
	2018	2017
Net Loss for the year	**(2,477,108)**	**(7,657,830)**
Cumulative translation adjustment, net	(36,501)	(22,577)
Retirement benefit obligations	(10)	(582)
Other comprehensive (loss) income for the year	**(36,511)**	**(23,159)**
Total comprehensive (loss)	**(2,513,619)**	**(7,680,989)**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
In thousands of Reais – R$

			Capital reserves					
	Note	Capital	Special monetary restatement of PPE	Premium on share subscription	Tax incentive reserves	Comprehensive income adjustments	Accumulated deficit	Total
Balance at December 31, 2016		**297,025**	**785**	**1,681**	**10**	**1,682,404**	**(8,903,911)**	**(6,922,006)**
Loss for the year		-	-	-	-	-	(7,657,830)	(7,657,830)
Other comprehensive (loss) income								
Cumulative translation adjustment, net	22	-	-	-	-	(22,577)	-	(22,577)
Retirement benefit obligations	22	-	-	-	-	(582)	-	(582)
Total comprehensive income		**-**	**-**	**-**	**-**	**(23,159)**	**-**	**(23,159)**
Balance as of December 31, 2017		**297,025**	**785**	**1,681**	**10**	**1,659,245**	**(16,561,741)**	**(14,602,995)**
Loss for the year		-	-	-	-	-	(2,477,108)	(2,477,108)
Other comprehensive (loss) income								
Cumulative translation adjustment, net	22	-	-	-	-	(36,501)	-	(36,501)
Retirement benefit obligations	22	-	-	-	-	(10)	-	(10)
Total comprehensive (loss) income		**-**	**-**	**-**	**-**	**(36,511)**	**-**	**(36,511)**
Balance as of December 31, 2018		**297,025**	**785**	**1,681**	**10**	**1,622,734**	**(19,038,849)**	**(17,116,614)**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF CASH FLOWS
Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2018	2017	2018	2017
Cash flows from operating activities					
Loss before tax		(1,810,158)	(7,367,049)	(1,810,104)	(7,366,971)
Adjustments to reconcile loss before tax to cash from operations:					
Depreciation and amortization	12 & 13	193,336	189,968	193,454	190,125
Reversal of allowance for doubtful accounts	25	(10,948)	(5,378)	(10,717)	(5,378)
Reversal of provision for inventory obsolescence	7	(21)	(4,767)	(21)	(4,767)
Reversal of provision for realization of recoverable taxes	26	(1,685)	(7,046)	(1,685)	(7,046)
Provision for realization of other assets		944	324	944	324
Reversal (provision) for contingencies	19	(9,929)	123,274	(9,929)	123,274
Provision for other liabilities	20	407,506	5,940,590	407,506	5,940,590
Reversal for impairment of property, plant and equipment	12	(5,459)	(215,672)	(5,459)	(215,672)
Losses on disposal of property, plant and equipment	25	11,047	142,053	11,048	142,084
Equity in the results of investees	10	(595)	(539)	-	-
Interest on loans and financing		708,235	1,102,452	708,235	1,102,452
Unrealized foreign exchange gains and losses		(362,522)	97,605	(362,527)	97,203
		(880,249)	**(4,185)**	**(879,255)**	**(3,782)**
(Increase) decrease in operating assets:					
Restricted short-term investments		(789)	(895)	(789)	(874)
Trade accounts receivable		20,437	4,716	20,437	(1,146)
Inventory		4,140	21,075	4,140	21,075
Recoverable taxes		6,954	33,744	6,953	33,749
Court deposits		(77,481)	(117,539)	(77,481)	(117,539)
Prepaid expenses		10,060	(9,508)	10,127	(9,468)
Distribution of dividends - Subsidiaries		-	1,197	-	-
Other assets		13,810	(7,275)	16,338	(7,145)

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

>> TO BE CONTINUED

>> CONTINUATION

STATEMENT OF CASH FLOWS
Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2018	2017	2018	2017
Increase (decrease) in operating liabilities:					
Trade payables		33,634	(242,192)	33,630	(242,210)
Taxes payable		81,593	98,435	81,425	98,502
Payroll, provisions and social contributions		(108)	(9,489)	(55)	(9,485)
Income tax paid	28	-	-	(15)	(47)
Interest payment		(70,082)	(653)	(70,082)	(653)
Other liabilities		(12,644)	(1,293,469)	(15,662)	(1,295,449)
Net cash provided by (used in) operating activities		**(870,725)**	**(1,526,038)**	**(870,289)**	**(1,534,472)**
Cash flows from investing activities					
Write-down of property, plant and equipment and intangible assets	12 & 13	(115,191)	24,281	(115,191)	24,680
Net cash provided by (used in) investing activities		**(115,191)**	**24,281**	**(115,191)**	**24,680**
Cash flows from financing activities					
Financing obtained from third parties and stockholders		1,004,227	1,509,545	1,004,227	1,509,545
Net cash provided by (used in) financing activities		**1,004,227**	**1,509,545**	**1,004,227**	**1,509,545**
Effects of exchange rate changes on cash and cash equivalents		6,102	68	6,102	68
Net increase (decrease) in balance of cash and cash equivalents		**24,413**	**7,856**	**24,849**	**(179)**
Cash and cash equivalents at the beginning of year		55,568	47,712	57,473	57,652
Cash and cash equivalents at the end of the year		79,981	55,568	82,322	57,473
		24,413	**7,856**	**24,849**	**(179)**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF VALUE ADDED

At December 31 – In thousands of Reais – R$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Revenue				
Sales of goods, products and services	116,414	85,177	116,414	85,177
Other revenue	827,384	9,676	827,384	9,693
Revenue relating to construction of Company assets	115,191	57,210	115,191	142,267
Allowance for doubtful accounts	10,948	5,378	10,948	5,378
	1,069,937	**157,441**	**1,069,937**	**242,515**
Consumables acquired from third parties				
Cost of goods sold and services rendered	(588,199)	(573,135)	(586,194)	(649,079)
Material, electricity, outsourced services and other	(2,038)	(5,049,040)	(1,203)	(5,048,246)
Recovery/(loss) of asset values	(6,382)	142,025	(6,382)	142,025
	(596,619)	**(5,480,150)**	**(593,779)**	**(5,555,300)**
Gross	**473,318**	**(5,322,709)**	**476,158**	**(5,312,785)**
Depreciation and amortization	(193,336)	(189,968)	(193,454)	(190,125)
Net value added produced by the Company	**279,982**	**(5,512,677)**	**282,704**	**(5,502,910)**
Transferred value added				
Equity in results of investees	595	539	-	-
Finance income	1,124,553	101,706	1,124,448	101,730
	1,125,148	**102,245**	**1,124,448**	**101,730**
Total value added to be distributed	**1,405,130**	**(5,410,432)**	**1,407,152**	**(5,401,180)**
Distribution of value added	**1,405,130**	**(5,410,432)**	**1,407,152**	**(5,401,180)**
Personnel				
Direct compensation	107,513	124,141	109,232	131,982
Benefits	59,613	127,518	59,857	128,756
Government Severance Indemnity Fund for Employees (FGTS)	8,333	9,858	8,333	9,858
Taxes				
Federal	735,303	361,377	735,460	361,601
State	3,048	514	3,048	514
Municipal	5,472	9,460	5,472	9,460
Interest expenses				
Interest on loans, financing and other debt items	2,962,956	1,614,530	2,962,858	1,614,479
Interest on stockholders' equity				
Loss for the period	(2,477,108)	(7,657,830)	(2,477,108)	(7,657,830)

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

1. OPERATIONAL CONTEXT

Samarco Mineração S.A. ("Samarco", "Company" or "Parent Company"), a privately held corporation, is a joint venture owned by Vale S.A. ("Vale") and BHP Billiton Brasil Ltda. ("BHP Billiton Brasil") with each having a 50 per cent shareholding. Samarco's registered office is located in Belo Horizonte - Minas Gerais ("MG"). Samarco has an integrated operation which consists of the mining and beneficiation of low-grade iron ore and the transportation of the concentrated ore in the form of slurry through pipelines. These pipelines connect the two operational units of the Company, in Minas Gerais and Espírito Santo (ES). At the Ponta Ubu unit in the municipality of Anchieta, ES, the ore is dewatered and undergoes the process of transformation into pellets, which are the Company's main product. The pellets are shipped overseas from Samarco own port facility in Anchieta, mostly to international buyers.

Samarco's ore reserves, prior to the failure of the Fundão tailings dam in November 2015, were based upon mineral resources located in the municipalities of Mariana and Ouro Preto, MG, compromising mineral resources estimated at 7.4 billion metric tons (not audited). As of October 2015, the recoverable or mineable reserves, based on the technical and economic conditions and mineral characteristics, were estimated at 2.9 billion metric tons (not audited).

After the failure of the Fundão tailings dam in November 2015 and suspension of the Company's operations in Germano/Alegria, the Company is reviewing its operational reserves. Consequently, Samarco is currently not in a position to inform or confirm its reserves as of December 31, 2018. However, it is expected that the ore reserves will be declared again after the restart of Samarco's operations.

a) Failure of the Fundão dam

As detailed in Note 3, in November 2015, as a consequence of the failure of the Fundão tailings dam, the operations in Germano/ Alegria ("Mariana complex") were temporarily suspended by order of government agencies - (the State Secretariat for Sustainable Development and Environment ("SEMAD") and the National Mineral Production Department ("DNPM") . The latter has since become the National Mining Agency ("ANM").

On March 2, 2016, Samarco and its stockholders, Vale and BHP Billiton Brasil signed the "*Termo de Transação e Ajustamento de Conduta*", ("Framework Agreement" or "TTAC"), as contained in the case records of the Public Civil Action brought by the Federal Government and others, No. 0069758-61.2015.4.01.3400, ongoing before the 12th Federal District Court in Belo Horizonte/ MG, to determine the measures and actions to remedy and compensate for environmental and socio-economic damages caused by the failure of the Fundão dam.

In compliance with the Framework Agreement, on August 2, 2016, Samarco, Vale and BHP Billiton Brasil created Fundação Renova ("Fundação" or the "Foundation") with the objective of developing and implementing environmental and socio-economic programs to remediate and provide compensation for damages caused by the failure of the Fundão dam. Samarco is responsible for funding the Foundation, subject to the schedule and other conditions stipulated in the Framework Agreement. To the extent that Samarco fails to meet its financial obligations under the Framework Agreement, both Vale and BHP Billiton Brasil have funding obligations to make up for any shortfall as stipulated by the Framework Agreement, in proportion to their 50 per cent shareholdings in Samarco.

On January 18, 2017, the Federal Public Prosecution Service, Samarco and its stockholders signed a Preliminary Agreement, subsequently amended on November 16, 2017 (Note 3(h)).

The Preliminary Agreement provides for the appointment of specialists to assess the programs related to environmental and social remediation as well as evaluation and monitoring of the programs established under the TTAC.

Under the Preliminary Agreement, Samarco and its stockholders also agreed to provide an interim security ("Interim Security") totaling R$ 2,200,000.

On June 25, 2018, the parties to the Framework Agreement, the Public Defender's Office of Minas Gerais, Espírito Santo and the Union, and the signatories to the TTAC entered into a new agreement ("Governance TAC"), as disclosed in note 3(f) and 3(h), which:

(i) Increases the participation of people affected by the dam failure in all phases related to the reparation process;

ii) Expands the participation in its governance of the Public Prosecution Office and Public Defender´s Office of Minas Gerais, Espírito Santo and the Union, together with the signatories to the TTAC;

iii) Provides for the extinguishment of the Public Civil Action of R$ 20,000,000 (Note 3(f)) and suspension of the Public Civil Action of R$ 155,000,000 (Note 3(f)) for a period of two years from the date of ratification;

iv) States formally that the Framework Agreement remains in effect for the signing parties;

v) Establishes a process for the negotiation of the programs outlined in the TTAC with the participation of those affected over a period of two years, to advance in the settlement of the Public Civil Action of R$ 155,000,000;

(vi) Maintains the interim security provided under the Preliminary Agreement for a period of 30 months, after which Samarco, Vale and BHP Billiton Brasil will be required to provide security of an amount equal to the Foundation's annual budget up to a limit of R$ 2,200,000; and

(vii) Reiterates the guarantees offered by the companies under the Preliminary Agreement for the funding of the measures necessary for the full compensation of the damages resulting from the dam failure.

Samarco's mining and ore processing activities remain suspended, pursuant to an administrative decision of SEMAD issued on 11 October 2016, which also requires the Company to pursue corrective environmental licensing. On June 23, 2016, Samarco submitted the Environmental Impact Study and the respective Environmental Impact Report ("EIA" / "RIMA") to SEMAD, related to the environmental licensing process for the use of the SDR Alegria Sul Pit for tailings disposal. In December of 2016, public hearings were held, coordinated by SEMAD, in the municipalities of Mariana and Ouro Preto. Subsequently the corresponding Preliminary and Installation Licenses (LP + LI) nº.02 were issued on December 13, 2017. On September 28, 2018, the Company entered into an agreement with the Minas Gerais Public Prosecutors to contract an independent technical audit to monitor the construction of the SDR Cava de Alegria Sul. Considering the revalidation of the permits issued by the municipal councils of Mariana and Ouro Preto and this important alignment with the Public Prosecution Office, work started on this project. Thus, since October 2018, the Company has been working on preparing the Alegria Sul pit to receive waste from the iron ore beneficiation process, and has subsequently applied for an Operation License (LO) together with a Corrective Operations License (LOC).

The other structures of the Germano Complex are awaiting the issue of a Corrective Operational License ("LOC"), pursuant to administrative decision issued on October 11, 2016. The Environmental Impact Assessment and Environmental Impact Report (EIA/RIMA) related to this process were submitted to SEMAD on September 1, 2017 and are currently under review. As part of the procedure required for the analysis of an application for a license, public hearings were held in December 2017 in the municipalities of Ouro Preto, Mariana and Matipó. The agreement of the neighboring Conservation Units has already been obtained and the licensing process is now being reviewed by the Priority Projects Superintendency of SEMAD.

Up till 31 December 2018, Vale and BHP Billiton Brasil had contributed with R$ 2,757,571, split between contributions to support the Foundation and short-term loans to Samarco, The contributions to the Foundation were to support the continuity of the remediation and compensation programs pursuant to the Framework Agreement. The short-term facility supported Samarco's remediation and dam stabilization work and its working capital needs.

As a result of the dam failure, the Company is a party to several judicial, administrative, civil, environmental and labor proceedings, for which it cannot provide a reliable estimate of outcomes and consequences (Note 3 (h)).

b) Going Concern

Due to the failure of the Fundão dam (Note 1(a) and Note 3), the operations of extraction and beneficiation of iron ore have been suspended. This has significantly affected the Company's capacity to generate cash flows and fulfill its financial obligations.

At December 31, 2018, the Company presents a net capital deficiency of R$ 17,116,614 (R$ 14,602,995 at 31 December 2017) in the parent company and consolidated financial statements, and, in the parent company's financial statements, current liabilities exceeded current assets by R$23,310,323 (R$17,982,229 at 31 December 2017) in the parent company and R$ 23,292,630 (R$ 17,967,735 31 December 2017) in the consolidated financial statements. For the fiscal year of 2018, the Company presented negative cash flows from operations of R$ 870,725 (R$ 1,526,038 at 31 December 2017) in the parent company and R$ 870,289 (R$ 1,534,472 at 31 December 2017) in the consolidated financial statements.

As informed in Note 15, "Loans and Financing", the Company has not been able to meet certain obligations of its loan and financing agreements (covenants). As a result of this default, all of these loans and financings were reclassified to short term obligations, also reflecting accrued interest on the overdue installments and the application of delinquent interest. The Company has total loans and financing (including financial charges payable) in the amount of R$ 20,374,555 (R$ 16,181,280 at December 31, 2017), classified as current at December 31, 2018.

The Company has hired advisors who have been maintaining contacts with the lenders' with the objective of discussing a restructuring of its existing loan and financing agreements conditions in view of its current financial situation.

Samarco is also a party to several legal and administrative proceedings involving civil, labor and environmental claims (Note 3 (h). Samarco negotiated the Framework Agreement/TTAC and other agreements in some relevant actions, for which there are liabilities recognized by the company. Furthermore, in several of these proceedings the Company is subject to injunctions, such as mandatory court deposits and freezing of accounts, which may further restrict its cash liquidity. Also, considering the uncertainties of the current status of the proceedings, certain provisions were constituted based on an estimated interval of probable loss, and certain other amounts are subject to significant uncertainty due to the possibility of changes in the final assumptions and dependence on various factors which are not exclusively under the control of the company. Thus, the reported amounts and the disclosure of possible losses may not reliably reflect the actual losses, as they may differ significantly from those which are reported and disclosed in the financial statements. Unfavorable results related to the existing litigation may significantly worsen the company´s asset and liability position.

Vale and BHP Billiton Brasil have provided funds to Samarco during exercise and have been called upon to fulfill the Company's obligations under the Framework Agreement/TTAC. In the year of 2018, the shareholders contributed R$ 2,091,011 (R$ 1,280,000 to the Foundation and R$ 666,560 (US$178,800) to Samarco, the latter amount being divided into R$ 629,572 (US$167,950) to support the Company's operational activities and R$ 36,989 (US$ 10,850) to defray the expenses of the TTAC programs which are still under Samarco's responsibility.

In the first semester of 2019, short term loans by VALE and BHP Billiton Brasil in the amount of R$ 630,295 (USD 163,289) will allow Samarco to continue its efforts of remediation, stabilization of structures and operation. The amounts will be transferred to Samarco only to the extent required and subject to the approval of the budget proposed for the period in which the resources are to be allocated. In addition to these amounts, Samarco has not received any other formal commitment of funding from Vale or BHP Billiton Brasil, and currently has no other options for financing.

The Company is still not able to present a reliable estimate as to when its operations will resume. Installation and operational permits will be required before it can again initiate its operations.

Samarco is striving to obtain the outstanding environmental licenses from the competent agencies. While at the same time looking for new methods of operation and alternative solutions for the disposal of the tailings generated in the Germano Complex concentrators, considering the next mining scenario, the Company is also developing studies to implement the dewatering of sandy tailings so as to allow the disposal of this material in stacks and thus increase the useful life of the existing structures. The main objective here is to expand the horizon of the use of the Alegria Sul pit to approximately 16 Mm^3 (not audited). The project takes into account basically two potential options: structures for stacking of filtrated waste (piles or pits) and industrial filtration plants.

Samarco considers that the resumption of its operations is essential to stay in business. However, the restart depends on the resolution of certain factors, some of which are beyond its control, such as:

- Satisfactory renegotiation of the debt obligations and conditions with its creditors

- Adequate financing to support the operations before and during the restart

- Obtaining the operating licenses necessary to permit the safe restart of its operations.

In the event the above combination of conditions required for the operational restart does not occur, the Company may be unable to continue its operations, resulting in material uncertainty and, therefore, may not be able to realize its assets and fulfill its obligations in the normal course of business. The financial statements include no adjustments to reflect the scenario which would ensue if the Company were unable to continue operating.

c) Company equity interests

Samarco participates in the following companies (together the "Group").

- Samarco Iron Ore Europe B.V. ("Samarco Europe") - direct interest of 100% - headquartered in the Netherlands; this company was incorporated on October 13, 2000 to provide marketing and selling services for iron ore produced by Samarco. It also provides support to clients through technical seminars and market studies.

- Samarco Asia Ltd. ("Samarco Asia") - direct interest of 100% - headquartered in Hong Kong; this company was acquired on July 10, 2001 by Samarco Europe to provide marketing and selling services through commercial representation in the Asia-Pacific region.

- Samarco Finance Ltd. ("Samarco Finance") - direct interest of 100% - headquartered in the Cayman Islands, this company was incorporated on February 21, 2000 to optimize Samarco's foreign-trade business, by supporting exports (resale) of iron ore acquired from the Company to designated clients and to borrow funds on the international market and subsequently pass them through to the Company.

The Executive Board approved the issuance of these financial statements on May 03, 2019.

2. PRESENTATION OF THE FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

The main accounting policies applied in the preparation of these financial statements are outlined below. These policies were applied in a consistent manner over previous years, unless stipulated otherwise.

2.1 Presentation of financial statements

(a) Statement of compliance

The parent company and consolidated financial statements have been prepared in accordance with the accounting practices adopted in Brazil (BR GAAP) and take into account all of the relevant information pertinent to the financial statements themselves, to the exclusion of all others, as consistent with the data used by management in its administration of the Company.

The statement of value added was prepared in accordance with accounting pronouncement CPC 09 - Statement of Value Added, presented as an integral part of the financial statements pursuant to BR GAAP applicable to listed companies.

Details on the accounting policies of the Company and its subsidiaries are presented in the notes No. 2.5 to No. 2.21.

The preparation of financial statements in accordance with accounting practices adopted in Brazil requires that its management use its judgment in determining and recording accounting estimates. The Company reviews the estimates and assumptions at least once a year. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 2.2.

The accounting practices adopted in Brazil comprise those included in the Brazilian company law and the statements, guidelines and interpretations issued by the Committee of Accounting Instructions (CPC) and by the Federal Accounting Council (CFC).

(b) Basis of preparation

The financial statements were developed on the basis of historic cost convention, except for certain financial instruments measured by their fair value, as described in the accounting practices below. The historic cost is generally based on the fair value of the payments made in exchange for assets.

(c) Changes in accounting policies and disclosures

CPC 47 (IFRS 15) establishes a comprehensive framework for determining whether and when a revenue is recognized and how the revenue is measured. It replaced CPC 30 (IAS 18) - Revenue, CPC 17 (IAS 11) - Construction Contracts and related interpretations. In accordance with CPC 47 (IFRS 15), revenue is recognized when the customer obtains control of the goods or services. Determining the timing of the transfer of control - at a specific point in time or over time - requires judgment. The Company and its subsidiaries adopted the new rule on January 1, 2018, the effective date of the initial adoption. The Company performed an analysis of IFRS 15 and did not identify material impacts in relation to the accounting practices currently adopted.

CPC 48 (IFRS 9) establishes requirements to recognize and measure financial assets, financial liabilities and certain contracts for the purchase or sale of non-financial items. This standard replaces CPC 38 / IAS 39 Financial Instruments: Recognition and Measurement. The adoption of CPC 48 (IFRS9) did not have a significant effect on the Company's accounting policies related to financial liabilities and derivative financial instruments, and further information is disclosed in Note 2.6.

2.2 Critical accounting estimates and judgments

The preparation of financial statements requires the use of critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's accounting policies.

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Based on assumptions, the Company makes estimates concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. These estimates are based on the best knowledge existing in each financial year. Changes in facts and circumstances could lead to a revision of estimates; actual future results could diverge from the estimates.

The information on the uncertainties related to the estimates and assumptions at December 31, 2018 that presents a significant risk that is likely to cause a significant adjustment in the carrying amounts of assets and liabilities for the next fiscal year is contemplated below.

(i) Provision for socio-environmental and socio-economic recovery

The provision for socio-environmental and socio-economic recovery is made for areas impacted or reparation of damages which generate a current obligation on the Company. This process involves complex estimates for determining the future disbursement expected by management and by its independent consultants (Note 3).

(ii) Income Tax

Current and deferred tax is calculated in accordance with the interpretations deriving from the existing legislation. This process normally involves complex estimates to determine the taxable income, deductible or taxable items and temporary differences. The measurement of the recoverability of deferred tax on temporary differences takes into account the estimated taxable income based on future cash flows, as informed in Note 28.

(iii) Impairment

The Company evaluates its assets with a defined useful life yearly for the existence of indicators of impairment. If such indicators are found, the recoverability of its tangible and intangible assets, grouped by cash generating unit, is tested. The discounted cash flow criterion is normally used, which depends on several estimates, subject to market conditions at the time the impairment test is conducted, as informed in note 12.1.

(iv) Mineral reserves and useful life of mines

The estimated proven and probable reserves are periodically evaluated and updated. These reserves are determined by using generally accepted geological estimation techniques. The estimated volume of the mineral reserves is the basis for determining the depletion of the respective mines and the estimated useful life is a prime factor for quantifying the provision for environmental recovery of the mines, as informed in note 13.1. Any change in the estimated volume of reserves of the mine and the useful life of the underlying assets could have a significant impact on the depreciation, depletion and amortization charges recognized in the financial statements. Changes in the estimated useful life of the mine could affect the estimated provision for environmental expenses, the recovery thereof and impairment analyses

Following the failure of the Fundão tailings dam in November 2015 and the temporary suspension of operations in the Germano/Alegria areas, the Company is reviewing the operation's resources and reserves.

(v) Asset retirement obligations

The Company recognizes an obligation for demobilization of assets in the period in which the disturbance occurs. This provision is determined based on the present value of the cash flows necessary to demobilize the assets. The Company considers the accounting estimates related to the recovery of degraded areas and the cost of closing a mine as a critical accounting practice as it involves large provisions and estimates involving a range of assumptions, such as interest rates, inflation, useful life of the asset under analysis and the current stage of depletion as well as the projected depletion dates of each mine. These estimates are revised annually, as informed in note 20.

(vi) Provision for contingencies

Management in conjunction with its legal advisers analyzes contingencies. The Company's analyses include factors such as hierarchy of laws, case law available, recent decisions delivered by courts and their relevance in the legal framework. These evaluations involve management judgment, as informed in notes 3(h) and 19.

Provisions are recorded when the value of a probable loss can be reasonably estimated.

2.3 Consolidation

The Company's consolidated financial statements, which include the financial statements of its subsidiaries, have been prepared in accordance with applicable consolidation practices and legal provisions. Balances of unrealized revenues, expenses and profits between companies are eliminated from the consolidated financial statements. Unrealized gains deriving from transactions with investees recorded by the equity method are eliminated against the investment in proportion to the Group's interest in the investee.

(a) Subsidiaries

Subsidiaries are all entities over which the Group exercises control. The Group controls an entity when it is exposed or entitled to variable returns deriving from its involvement in the entity and can influence its returns due to the power it exercises over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

(b) Joint operations

A jointly controlled operation is an arrangement that involves the use of joint assets and other resources with each owner using its own resources in the joint operation. Joint operations are recorded in the financial statements to represent the entity's contractual rights and obligations. The assets, liabilities, revenue and expenses related to interests in joint operations are therefore recorded individually in the financial statements. The Company has an interest of 49% in the Guilman-Amorim hydroelectric power plant; the remaining 51% of the joint-operation belongs to the partner Arcelor Mittal Brasil S.A.

(c) Investments

In the individual financial statements, subsidiaries are accounted for using the equity method based on the financial statements of the investees. The financial statements of investments based abroad were prepared by adopting accounting practices consistent with those observed by the Company. The subsidiaries have the same functional currency as the parent, the US dollar.

2.4 Foreign currency translation

(a) Functional currency

The items in the financial statements of each one of the companies of the Group were measured using the US dollar ("USD" or "US$") which is the functional currency of the Company and its subsidiaries, as it is the currency of the main economic environment in which they operate, generate and consume cash.

(b) Presentation currency

In accordance with Brazilian legislation, these financial statements are being presented in Brazilian Reais. Financial statements prepared in the Company's functional currency are translated to Reais by using the following criteria:

- Assets and liabilities are converted at the closing rate at the respective reporting date.
- Accounts in the statements of operations, comprehensive income (loss), cash flows and value added are converted at the rates in effect on the transaction dates.
- Stockholders' equity at historical rate.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The exchange gain/loss resulting in the cumulative translation adjustment is recognized in a specific account of stockholders' equity, under "adjustments in asset assessment".

(c) Transactions and balances
Transactions in currencies other than the Company's functional currency are translated into the functional currency at the exchange rates prevailing on the transaction dates or valuation dates, if the items are remeasured. Exchange gains and losses resulting from the settlement of these transactions and the translation at the exchange rates at the end of the financial year for monetary assets and liabilities denominated in foreign currency are recognized in the statement of operations under finance income.

The parent company and consolidated financial statements measured in the functional currency (USD) are as follows:

BALANCE SHEET – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Current assets				
Cash and cash equivalents	20,627	16,784	21,231	17,359
Restricted short-term investments	495	342	495	342
Accounts receivable	1,969	5,177	1,568	4,777
Inventory	3,656	2,627	3,656	2,627
Recoverable taxes	20,792	25,964	20,792	25,964
Prepaid expenses	376	3,482	390	3,518
Advances to suppliers	1,459	583	1,459	583
Other assets	4,564	11,238	4,566	11,238
Total current assets	**53,938**	**66,197**	**54,157**	**66,408**
Noncurrent assets				
Court deposits	477,463	535,861	477,463	535,861
Recoverable taxes	19,808	23,187	19,808	23,187
Advances to suppliers	102,303	105,256	102,303	105,256
Inventory	11,379	13,329	11,379	13,329
Other assets	4,323	5,549	4,373	5,602
	615,276	**683,182**	**615,326**	**683,235**
Investments	4,681	4,518	-	-
Property, plant and equipment	5,202,277	5,314,176	5,202,288	5,314,224
Intangible assets	59,761	24,437	59,761	24,437
Total noncurrent assets	**5,881,995**	**6,026,313**	**5,877,375**	**6,021,896**
Total assets	**5,935,933**	**6,092,510**	**5,931,532**	**6,088,304**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

BALANCE SHEET – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Current liabilities				
Trade payables	19,724	12,945	19,732	12,953
Loans and financing	4,782,982	4,588,499	4,782,982	4,588,499
Financial charges payable	476,054	303,948	476,054	303,948
Payroll, provisions and social contributions	5,513	6,488	5,543	6,507
Taxes payable	62,000	51,390	62,011	51,423
Provision for income tax	-	-	37	31
Other provisions	710,724	525,595	710,724	525,595
Other liabilities	13,806	14,349	9,372	10,084
Total current liabilities	**6,070,803**	**5,503,214**	**6,066,455**	**5,499,040**
Noncurrent liabilities				
Taxes payable	51,894	58,553	51,894	58,553
Dividends	724,162	848,264	724,162	848,264
Provisions for contingencies	29,315	37,333	29,315	37,333
Deferred income tax	585,471	482,951	585,418	482,919
Other provisions	1,879,320	3,017,326	1,879,320	3,017,326
Other liabilities – Related parties	993,366	531,380	993,366	531,380
Other liabilities	19,773	28,794	19,773	28,794
Total noncurrent liabilities	**4,283,301**	**5,004,601**	**4,283,248**	**5,004,569**
Equity				
Capital	409,774	409,774	409,774	409,774
Capital reserves	1,619	1,619	1,619	1,619
Comprehensive income adjustments	(1,294)	(1,291)	(1,294)	(1,291)
Accumulated deficit	(4,828,270)	(4,825,407)	(4,828,270)	(4,825,407)
Total stockholders' equity	**(4,418,171)**	**(4,415,305)**	**(4,418,171)**	**(4,415,305)**
Total liabilities and stockholders' equity	**5,935,933**	**6,092,510**	**5,931,532**	**6,088,304**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

STATEMENT OF OPERATIONS – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Revenue	29,208	24,612	29,208	24,612
Cost of goods sold and services rendered	(185,709)	(254,904)	(185,709)	(254,904)
Gross (loss) profit	**(156,501)**	**(230,292)**	**(156,501)**	**(230,292)**
Operating expenses				
Selling	(11,291)	(22,914)	(10,863)	(22,767)
General and administrative	(15,466)	(17,697)	(15,466)	(17,697)
Other operating (expenses) income, net	647,366	(1,479,999)	647,124	(1,480,042)
Equity in results of investees	164	105	-	-
Profit (Loss) before finance result	**464,272**	**(1,750,797)**	**464,294**	**(1,750,798)**
Finance result				
Finance income	24,970	43,684	24,970	43,685
Finance expenses	(488,078)	(502,366)	(488,079)	(502,344)
Net foreign exchange variance	115,234	4,214	115,229	4,216
Profit (Loss) before taxation	**116,398**	**(2,205,265)**	**116,414**	**(2,205,241)**
Income tax	(119,260)	(85,480)	(119,276)	(85,504)
(Loss) for the year	(2,862)	(2,290,745)	**(2,862)**	**(2,290,745)**

STATEMENT OF COMPREHENSIVE INCOME – US$

	Parent Company and Consolidated	
	2018	2017
Loss for the year	**(2,862)**	**(2,290,745)**
Retirement benefit obligations	(3)	(176)
Other comprehensive (loss) income for the year	**(3)**	**(176)**
Total comprehensive (loss) income	**(2,865)**	**(2,290,921)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY – US$

		Capital reserves				
	Capital	Premium on share subscription	Tax incentive reserves	Comprehensive income adjustments	Accumulated deficit	Total
Balance at December 31, 2016	**409,774**	**1,616**	**3**	**(1,115)**	**(2,534,662)**	**(2,124,384)**
Loss for the year	-	-	-	-	(2,290,745)	(2,290,745)
Other comprehensive (loss) income						
Retirement benefit obligations	-	-	-	(176)	-	(176)
Total comprehensive (loss) income	**-**	**-**	**-**	**(176)**	**-**	**(176)**
Balance as of December 31, 2017	**409,774**	**1,616**	**3**	**(1,291)**	**(4,825,407)**	**(4,415,305)**
Loss for the year	-	-	-	-	(2,863)	(2,863)
Other comprehensive (loss) income						
Retirement benefit obligations	-	-	-	(3)	-	(3)
Total comprehensive (loss) income	**-**	**-**	**-**	**(3)**	**-**	**(3)**
Balance as of December 31, 2018	**409,774**	**1,616**	**3**	**(1,294)**	**(4,828,270)**	**(4,418,171)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

STATEMENT OF CASH FLOWS – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Cash flows from operating activities				
Loss before tax	116,398	(2,205,265)	116,414	(2,205,241)
Adjustments to reconcile loss before taxation to cash from operations:				
Depreciation and amortization	88,460	88,765	88,497	88,816
Reversal of allowance for doubtful accounts	(3,834)	(1,754)	(3,427)	(2,161)
Reversal of provision for inventory obsolescence	(279)	(1,489)	(279)	(1,489)
Reversal of provision for realization of recoverable taxes	(66,448)	(8,934)	(66,448)	(8,934)
Provision for realization of other assets	189	94	189	94
Reversal of provision for contingencies	(8,018)	(38,391)	(8,018)	(38,391)
Reversal (provision) for other liabilities	(385,838)	1,486,722	(385,838)	1,486,722
Provision for impairment of property, plant and equipment (Fundão dam)	(1,951)	(95,364)	(1,951)	(95,364)
Losses on property, plant and equipment	3,962	74,461	3,962	74,546
Equity in the results of investees	(163)	(105)	-	-
Interest on loans	195,950	344,569	195,950	344,569
Exchange variance gains and losses	(157,766)	(14,091)	(157,766)	(14,092)
	(219,338)	**(370,782)**	**(218,715)**	**(370,925)**
(Increase) decrease in operating assets:				
Restricted short-term investments	(153)	(270)	(153)	(263)
Trade accounts receivable	(5,138)	1,540	(5,545)	143
Inventory	2,203	6,463	2,203	85,377
Recoverable taxes	807	17,185	806	17,186
Court deposits	58,398	(28,107)	58,398	(28,107)
Distribution of dividends - Subsidiaries	-	365	-	-
Prepaid expenses	2,842	(2,962)	2,865	(2,949)
Other assets	(79,883)	(7,563)	(79,882)	(86,398)

>> TO BE CONTINUED

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

>> CONTINUATION

STATEMENT OF CASH FLOWS – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Increase (decrease) in operating liabilities:				
Trade payables	6,740	(74,437)	6,741	(74,438)
Taxes payable	(2,777)	79,993	(2,820)	79,990
Payroll, provisions and social contributions	(204)	(2,862)	(193)	(2,861)
Income tax paid	(60)	-	(71)	6
Interest payment	(11,229)	(204)	(11,229)	(204)
Other liabilities	65,094	(98,323)	64,926	(98,925)
Net cash provided by (used in) operating activities	**(182,698)**	**(479,964)**	**(182,669)**	**(482,368)**
Cash flows from investing activities				
Write-down of property plant and equipment and intangible assets	(13,896)	8,220	(13,896)	8,150
Net cash provided by (used in) investing activities	**(13,896)**	**8,220**	**(13,896)**	**8,150**
Cash flows from financing activities				
Financing obtained from third parties and Stockholders	200,363	473,882	200,363	473,881
Net cash provided by (used in) financing activities	**200,363**	**473,882**	**200,363**	**473,881**
Effects of exchange rate changes on cash and cash equivalents	74	21	74	21
Net increase (decrease) in balance of cash and cash Equivalents	**3,843**	**2,159**	**3,872**	**(316)**
Cash and cash equivalents at the end of the year	16,784	14,625	17,359	17,675
Caixa e equivalentes de caixa no fim do exercício	20,627	16,784	21,231	17,359
	3,843	**2,159**	**3,872**	**(316)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

STATEMENT OF VALUE ADDED – US$

	Parent Company		Consolidated	
	2018	2017	2018	2017
Revenue				
Sales of goods, products and services	32,410	26,573	32,410	26,573
Other revenue	608,684	2,987	608,684	2,992
Revenue relating to construction of company assets	29,881	41,788	29,881	41,788
Allowance for doubtful accounts	3,834	1,754	3,834	1,754
	674,809	**73,102**	**674,809**	**73,107**
Consumables acquired from third parties				
Cost of goods sold and services rendered	(158,686)	(202,885)	(158,151)	(202,025)
Material, electricity, outsourced services and other	40,381	(1,505,539)	40,630	(1,505,343)
Recovery/(loss) of asset values	(1,239)	73,387	(1,239)	73,387
	(119,544)	**(1,635,037)**	**(118,760)**	**(1,633,981)**
Gross	**555,265**	**(1,561,935)**	**556,049**	**(1,560,874)**
Depreciation and amortization	(88,460)	(88,765)	(88,497)	(88,816)
Net value added produced by the Company	**466,805**	**(1,650,700)**	**467,552**	**(1,649,690)**
Transferred value added				
Equity in results of investees	164	105	-	-
Finance income	311,690	31,925	311,691	31,934
	311,854	**32,030**	**311,691**	**31,934**
Total value added to be distributed	**778,659**	**(1,618,670)**	**779,243**	**(1,617,756)**
Distribution of value added	**778,659**	**(1,618,670)**	**779,243**	**(1,617,756)**
Personnel				
Direct compensation	29,182	38,881	29,650	39,624
Benefits	16,688	39,927	16,754	40,044
Government Severance Indemnity Fund for Employees (FGTS)	2,258	3,084	2,258	3,084
Taxes				
Federal	137,440	107,443	137,483	107,513
State	(65,141)	(6,579)	(65,141)	(6,579)
Municipal	1,530	2,927	1,530	2,927
Interest expenses				
Interest on loans, financing and other debt items	659,564	486,392	659,571	486,376
Interest on stockholders' equity				
Loss for the period	(2,862)	(2,290,745)	(2,862)	(2,290,745)

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

2.5 Cash and cash equivalents

These include the balances of cash, bank deposits and investments in marketable securities with immediate liquidity with original maturities equal to or less than 90 days and involve insignificant risks of change in fair value.

2.6 Financial instruments

The assets and liabilities are recognized when the Company and its subsidiaries are a party to the contractual provisions of the instrument and are initially measured according to their fair value.

The transaction costs are directly attributable to the acquisition or issue of financial assets and liabilities (except for financial assets and liabilities recognized at fair value in the income statement) and are added to or deducted to the fair value of the financial assets or liabilities, if applicable, after the initial recognition. The transaction costs directly attributable to the purchase of financial assets and liabilities at fair value by means of income are immediately recognized in the income.

Financial assets and liabilities are presented net in the statement of assets and liabilities if, and only if, there is a current and enforceable legal right to offset the recognized amounts and if there is the intention of offsetting, or of realizing the asset and liquidating the liability simultaneously.

Financial assets

The classification of financial assets is based on the business model in which the asset is managed and its characteristics of contractual cash flows (binomial contractual cash flow and business model), as summarized below:

Categories/measurement	Conditions for definition of category
Amortized cost	Financial assets are held within a business model whose objective is to hold financial assets to collect contractual cash flows on specific dates.
Fair value through other comprehensive income (“FVTOCI”)	Financial assets are classified and measured at fair value through other comprehensive income if they are held in a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.
Fair value through profit or loss(“FVTPL”)	All other financial assets.

Accounts receivable from customers and other receivables that were classified as loans and receivables in accordance with CPC 38 (IAS 39) are now classified at amortized cost. Their respective classifications between amortized cost, FVTOCI and FVTPL are presented in note 30.2.

All regular acquisitions or disposals of financial assets are recognized or written off based on the trade date. Regular acquisitions or divestitures correspond to acquisitions or disposals of financial assets that require the delivery of assets within the term established by means of a market standard or practice.

The Company and its subsidiaries write off a financial asset only when the contractual rights to the cash flows from this asset expire or transfer the asset and substantially all the risks and benefits of the property to another company. When a financial asset is written off in its entirety, the difference between the book value of the assets and the sum of the consideration received and receivable is recognized in profit or loss.

Financial liabilities

These liabilities are classified in the initial recognition as: (i) amortized cost; or (ii) measured at fair value through profit or loss.

The Company’s financial liabilities are classified as measured at amortized cost using the effective interest method and include loans, financing and debentures, accounts payable to suppliers and obligations with related companies and other accounts payable, as disclosed in note 30.2.

The aforementioned financial liabilities are initially recognized in the receipt of funds, net of transaction costs, when applicable. At the balance sheet date, they are presented at their initial recognition, minus the amortization of the installments of principal, when applicable, plus corresponding charges incurred. Transaction costs are presented as a reduction of current liabilities and are appropriated to the income in the same payment term of the financing that originated it, based on the effective rate of each transaction.

Impairment of financial instruments

In relation to the impairment of financial assets, CPC 48 (IFRS 9) requires a model of expected credit losses against a credit loss model incurred in accordance with IAS 39 (CPC 38). The expected credit loss model requires the

Group to account for expected credit losses and changes in expected credit losses on each reporting date to reflect changes in credit risk since the initial recognition of financial assets. In other words, it is no longer necessary for a credit event to occur before credit losses are recognized.

Specifically, CPC 48 (IFRS 9) requires the Company to recognize a provision for expected credit losses on:

(1) Investments in debt instruments subsequently measured at amortized cost or at fair value through other comprehensive income,

(2) Amounts receivable from leases,

(3) Accounts receivable and contract assets, and

(4) Financial guarantee contracts to which the impairment requirements of CPC48 (IFRS 9) apply.

In particular, CPC 48 (IFRS 9) requires the Company to measure the provision for losses on a financial instrument in an amount equivalent to the expected impairment loss (PCE) over the useful life if the credit risk related to that financial instrument has increased from the initial recognition, or if the financial instrument corresponds to a financial asset subject to a reduction in the recoverable value acquired or originated. However, if the credit risk related to a financial instrument has not increased significantly since the initial recognition (except for a financial asset subject to impairment acquired or originated), the Group shall measure the provision for losses for that financial instrument corresponding to the PCE of the 12-month period. IFRS 9 also requires a simplified approach for measuring the provision for losses in a lifetime value for accounts receivable, contract assets and lease receivables under certain circumstances.

The Company periodically reviews its assumptions for the constitution of the provision for credit risk. For the accounts receivable, the company has adopted a simplified approach and calculated the foreseen credit loss, pursuant to Note 6, based on the expectation of default risk along the life of the financial instrument in view of the revision of the history of its current operations and improvement of its estimates.

2.7 Accounts receivable

Trade receivables consist of amounts owed by customers for goods or services acquired, and are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method, minus an allowance for doubtful accounts.

The provision for sales price reduction reflects the volatility of the global iron ore sector. Based on the trend of falling iron ore prices, management conducts an individual evaluation of each client's contract and makes a provision in an amount sufficient to cover any losses, pursuant to criteria already informed in note 2.6.

2.8 Inventories

Inventories are valued at average acquisition or production cost not in excess of the market or realization value.

Samarco uses the absorption costing system. Direct costs are appropriated objectively and indirect costs are appropriated based on normal production capacity and include expenses incurred on the acquisition of inventory, production and transformation costs and other costs incurred to bring the inventories to their current condition and location.

2.9 Property, plant and equipment

Property, plant and equipment are recorded at the cost of acquisition, formation or construction including capitalized financial charges.

Elements that comprise the cost of an item of property, plant and equipment are:

- Acquisition price, plus import taxes and unrecoverable purchase taxes, after deducting any commercial discounts and rebates.
- Any direct costs attributable to bringing the asset to its location and condition necessary to allow it to be operated as intended by management.
- The initial estimate of the cost of disassembling and removing the item and recovering the area where it is located. These costs comprise the obligation incurred by the Company upon acquiring the item or as a result of having used the item for a certain period.

When significant parts of an asset item have different useful lives, they are recorded as separate items (principal components) of property, plant and equipment.

Subsequent costs are capitalized only when it is probable that economic benefits expenses associated with the expenses will be earned by the

Depreciation and amortization commence from the date the assets are installed and ready for use. For the items directly related to the respective productive areas, the depreciation is calculated by the units produced method. For the remainder the depreciation is calculated based on the straight-line depreciation and amortization method taking into account the periods (Note 12).

Depreciation methods, useful lives and residual values are reviewed on each balance sheet date and adjusted if appropriate.

The gains and losses deriving from the sale of property, plant and equipment are determined by comparing the funds obtained through the sale against the book value of the property, plant and equipment, and are recorded in "Other operating expenses, net" in profit or loss.

2.10 Intangible assets

Intangible assets acquired separately consisting of easements, mining rights and software are measured upon initial recognition at their acquisition cost and, subsequently, less the accumulated amortization and impairment losses, when applicable.

Intangible assets with a defined useful life are amortized according to their estimated economic lives, as per Note 13, and when indications of impairment are identified, they are submitted to impairment testing.

Removal of overburden to access the ore deposits

The cost of overburden (costs associated with stripping overburden and other waste products) incurred during the development of the mine, before production, is capitalized as part of the depreciable cost of the asset under development. These costs are amortized over the mine's useful life, based on the proven and probable reserves.

The cost of overburden removal incurred during production is added to the value of the inventory, except when a specific extraction campaign is conducted to access deposits located deeper in the reserve. In this case, the costs are capitalized and recorded in noncurrent assets as ore extraction takes place, and will be amortized over the reserve's useful life.

Research and Development

Development expenditures are capitalized only if development costs can be measured reliably, if the product or process is technically and commercially viable, if the future economic benefits are probable, and if the Group has the intention and sufficient resources to complete the development and use or sell the asset. Other development expenses are recognized in the income statement as incurred. After initial recognition, capitalized development expenses are stated at cost, less accumulated amortization and any impairment losses.

2.11 Impairment of nonfinancial assets

The book values of the Company's nonfinancial assets with a defined useful life are reviewed at each reporting date for signs of impairment. If any such indication exists, then the asset's recoverable amount is determined.

Assets with an indefinite useful life are not subject to amortization and are tested annually for impairment. In the case of intangible assets in development not yet available for use, the recoverable value is estimated annually.

The recoverable amount of an asset or cash generating unit (CGU) is the greater of its value in use and its fair value less costs of disposal. When appraising the value in-use, the estimated future cash flows are discounted to their present values at a before-tax discount rate that reflects the current market terms regarding the capital recoverability period and the asset's specific risks.

For impairment testing purposes, assets that cannot be tested individually are grouped in the smallest group of assets that generate cash from continuous use and which are mainly independent from the cash flows from other assets or groups of assets.

Impairment losses are recognized when the book value of an asset or its cash generating unit (CGU) exceeds its estimated recoverable value. Impairment losses are recognized in profit or loss. For the years ended December 31, 2018 and 2017, following the suspension of activities at Germano in November 2015 and the expected increase in socioenvironmental and socioeconomic remediation costs, management conducted an impairment test of non-financial assets (Note 12).

2.12 Loans and financing

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost. Any difference between the proceeds (net of transaction costs) and the total settlement value is recognized in the statement of operations over the period of the borrowings using the effective interest method.

The loans are classified as current liabilities, unless the Company has an unconditional right to defer the settlement of the liability for at least 12 months after the date of the balance sheet.

The costs of loans and financing attributed directly to the acquisition, construction or production of a qualifying asset that requires a substantial period of time to be concluded for the purpose of use or sale are capitalized as part of the corresponding asset's cost when it is probable that future economic benefits will be generated in favor of the Company and the cost or value can be reliably measured. Other loans and financing costs are recorded as an expense in the period they are incurred.

2.13 Provision for contingencies

A provision is made for legal obligations when losses and resulting outflows are assessed as probable and the amounts can be measured reliably.

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

2.14 Provision for asset retirement and socioenvironmental and socio-economic remediation

Provisions are determined by discounting the estimated future cash flows to a pre-tax rate that reflects the current market assessments of the value of money at the time and specific risks for the related liability. The effects of derecognition of the discount on the passage of time are recognized in the statement of income as a financial expense.

(a) Asset retirement obligations

An asset retirement obligation is recognized when there is an approved detailed asset retirement plan. The expenses for mine closure resulting from the termination of activities are recorded as asset retirement obligations. The obligations primarily consist of closure costs. The asset retirement cost related to the obligation is capitalized as part of the property, plant and equipment, and is depreciated over the asset's useful life.

(b) Socioenvironmental and socio-economic remediation

The provision for socioenvironmental and socio-economic remediation is made in accordance with the determinations of the respective authorities and under the agreements reached on March 2, 2016 and 24 June 2018 (Notes 1 and 3). The provision for environmental remediation is recorded when an impacted area is identified that generates an obligation for the Company. A liability for compensating social damages is recognized when the obligation for future payments has been identified arising from past events subject to civil damages and, when there is a reliable estimate of the obligations.

2.15 Adjustment of assets and liabilities to present value

Monetary assets and liabilities are adjusted to their present value when the transaction is originally recorded, taking into account the contractual cash flows, the explicit and in certain cases implicit interest rate of the respective assets and liabilities and the prevailing rates in the market for similar transactions. This interest is subsequently reallocated to financial expenses and revenue in the statement of operations by the effective interest rate method for contractual cash flows.

2.16 Income tax

The Company calculates taxes based on existing legislation, considering legal tax benefits and deductions. Deferred tax credits are recognized on temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements to the extent that it is probable that future taxable profits will be available against which they can be utilized. This is measured at the rates expected to apply to the temporary differences when they are reversed, based on the laws that have been enacted or substantially decreed by the reporting date. Deferred tax assets and liabilities are offset and presented net in the balance sheet if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity.

The Company has a tax benefit for exports that provides for a reduction of income tax based on the profits obtained from the exploration of abundant minerals.

The Company has a final court decision (*res judicata*) in its favor, which ruled that, the "social contribution on net income" ("CSLL") is unconstitutional. It is not therefore not considering or paying this tax/ contribution (Note 19).

2.17 Employee benefits

(a) Retirement obligation

The Company's defined-contribution plan is a retirement benefits plan under which it pays fixed contributions to a separate entity (ValiaPrev) and incurs no legal or constructive obligations to pay additional amounts. Contributions are recognized as an employee benefit expense when due.

For the defined-benefit portion of the plan (ValiaPrev), a constructive obligation, the Company obtains the actuarial calculation. When the benefits of a plan are increased, the portion of the increase in the benefit related to past service of employees is recognized immediately in profit or loss.

The defined-benefit obligation is the present value of the gross defined-benefit obligation less the fair value of the plan's assets at the reporting date. Independent actuaries using the projected unit of credit method calculate it annually. The present value of the defined benefit obligation is determined by discounting future estimated cash disbursements using interest rates in line with market yields, which are denominated in the currency in which benefits are paid and have maturity terms close to those of the respective pension plan obligation. However, no asset is recognized, as there is no such provision in the bylaws for reimbursing the Company or reducing future contributions.

The actuarial gains or losses arising from the adjustment for experience and changes in actuarial assumptions are recorded directly in stockholders' equity as other comprehensive income, when incurred.

(b) Share-based payments
Samarco operates a compensation plan based on phantom stock, settled in cash. The fair value payable to employees relating to the long-term incentive plan is recognized as an expense with a corresponding increase in the liabilities. The amount is remeasured at least once a year, at the end of each fiscal year and on the settlement date. Any changes in the liability's fair value are recognized as personnel expenses in the statement of operations.

(c) Medical assistance
The Company provides life insurance and healthcare insurance benefits for its employees and their dependents, which are recorded on the accrual basis and are discontinued in the event the employee leaves the Company.

(d) Profit sharing
Based on its variable compensation policy, the Company provides a profit-sharing plan ("PLR") to its employees, subject to the performance of targets, the evaluation of results and the achievement of specific goals, which are established and agreed at the beginning of each year. A provision is recognized when the Company has a contractual obligation or a past event that has created a constructive obligation.

2.18 Capital
Each common share entitles the holder thereof to one vote on General Meeting resolutions.

2.19 Payment of dividends
Minimum mandatory dividends paid to the Company's stockholders are recognized as a liability in the Company's financial statements at the end of the year, pursuant to its bylaws. Supplemental amounts referring to the portion exceeding the minimum obligation required by law or the bylaws is held in a specific account in the stockholders' equity, and is only transferred to liabilities when declared by the stockholders' General Meeting.

2.20 Results of operations
Income and expenses are recognized on the accrual basis, and include costs, expenses and revenue, in addition to the earnings, charges and indexation or exchange variance at official indices or rates applied to current and noncurrent assets and liabilities. The attributable income-tax amounts are charged/credited to the statement of operations.

According to CPC 47 (IFRS 15), the recognition of revenues from contracts with clients has a new normative discipline, based on the transfer of control of the good or service promised, which may be at a specific moment in time (at a point in time) or over time, depending on the satisfaction or otherwise of the so-called "contractual performance obligations". Revenue is measured at the amount that reflects the consideration to which it is expected to be entitled and is based on a five-step model detailed below: 1) contract identification; 2) identification of performance obligations; 3) determining the price of the transaction; 4) allocation of the transaction price to the performance obligations; 5) revenue recognition.

Performance pledges are considered promises to transfer to the customer a good or service (or group of goods or services) that is distinct, or a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

(a) Recognition of revenue from product sales
Revenue is recognized at the moment in which contractual performance obligations are satisfaction. In our case, as most of the sales are made on a FOB (Free-on-Board) basis, the revenue is recognized when the product is delivered to the transporter. When the realization of an amount already recorded under revenue is uncertain, a provision for the uncollectible amount or amount unlikely to be realized is recognized as a price adjustment or loss directly classified as an expense.

(b) Recognition of revenue from services
The Company provides logistics services at its own port terminal. Service revenue is recognized at the moment in which contractual performance obligations are satisfaction. When the realization of an amount already recorded under revenue is uncertain, the uncollectible amount or amount unlikely to be realized is recognized as an expense.

(c) Finance income and costs
Finance income comprises interest income on funds invested and changes in the fair value of financial assets measured at fair value through profit and loss.

Finance costs comprise interest expenses on loans and financing, and changes in the fair value of financial assets measured through profit and loss.

Interest income and expenses are recognized as they accrue in profit or loss, using the effective interest method. Foreign currency gains and losses are reported on a net basis.

The effects of cash flows are discounted at a rate that reflects the specific risks inherent to the asset retirement obligation and recognized in the statement of income as a financial result.

2.21 Leasing
The Company is a party to leases in which a significant portion of the risks and rewards of ownership are retained by the lessor. Payments made for operating leases (net of any incentives received from the lessor) are recognized in profit or loss on the straight-line method during the lease period.

2.22 New standards that are not yet effective
The following new standards have been issued by the International Accounting Standards Board ("IASB") but were not in force for 2018. Whilst encouraged by the IASB, the early adoption of standards in Brazil is not permitted by the Brazilian Accounting Pronouncements Committee ("CPC").

CPC 06 R2 (IFRS 16) - Leases Operations "-" - CPC 06 R2 (IFRS 16) introduces a single model for the accounting of leases in the balance sheet for lessees.

Under this new rule, lessees will have to recognize the liabilities of future payments and the right to use the leased asset for practically all leases, including operational leases, and certain short-term contracts term or small amounts may remain outside the scope of this new standard.

The criteria for the recognition and measurement of leases in the lessors' financial statements are substantially maintained. IFRS 16 / CPC 06 R2 enters into effect for fiscal years beginning on January 1, 2019 and replaces IAS 17 "Leases" and corresponding interpretations. Management is evaluating the full impact of its adoption.

There are no other IFRS standards and this standard takes effect for years beginning on or after January 1, 2019 and replaces CPC 06 R1 - "Leasing Operations" and corresponding IFRIC interpretations that are not in effect.

The Company will apply CPC 06 R2 (IFRS 16) using the simpler approach and therefore the comparative information will not be updated to the first year of adoption.

Leasing where the Group is a Lessee
Based on the information available on 31 December 2018, the Company evaluated its contracts according to the new lease accounting rules introduced by CPC 06 R2 (IFRS 16) and estimates that on January 1, 2019, it will recognize assets related to use rights and liabilities of leases at current value in the total of R$ 24,454, where the amount of R$ 19,702 refers to current liabilities and R$ 4,752 to non-current liabilities.

Leasing where the Group is a Lessor
The Group does not have leasing contracts in which it is a Lessor.

Interpretation ICPC 22 (IFRIC 23) - "Uncertainty about the treatment of income tax"

The Interpretation addresses the accounting of income taxes when tax treatment involves uncertainty that affects application under CPC 32 (IAS 12) and does not apply to taxes or charges outside the scope of CPC 32 (IAS 12), nor does it specifically include requirements for the treatment of interest and penalties associated with uncertain taxes.

ICPC 22 (IFRIC 23) applies for annual periods beginning on or after 1 January 2019.

Management conducted a assessment of the impact of adopting ICPC 22 (IFRC 23) based on its position as of December 31, 2018 and concluded that there will be no significant impacts, as disclosed in note 28.

Other amended standards and interpretations will go into effect in 2019, but should not have a material impact on the consolidated financial statements of the Group.

- IFRIC 23 / ICPC 22 Uncertainty about Taxes on Profits.
- Prepayment Characteristics with Negative Remuneration (Changes in IFRS 9).
- Investment in affiliate, subsidiary and jointly controlled enterprise (Amendments to CPC 18 (R2) / IAS 28).
- Changes in the Plan, Reductions or Liquidation of the Plan (Amendments in CPC 33 / IAS 19).
- Cycle of annual improvements in IFRS 2015-2017 - various standards.
- Changes in the references to the conceptual framework in IFRS.
- IFRS 17 Insurance Contracts.

3. SIGNIFICANT EVENT - FAILURE OF THE FUNDÃO DAM

As a result of the failure of the Fundão tailings dam on November 5, 2015, material accounting adjustments were recorded particularly related to measures to prevent, remediate, contain and offset property, environmental and social damages.

Samarco incurred expenses and made provisions for future disbursements that have been recorded and reported in accordance with CPC 25 - "Provisions, contingent liabilities and contingent assets".

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The material accounting effects from this significant event on the Company's Statement of Financial Position, Statement of Operations and Statement of Cash Flows in the financial year ended December 31, 2018 and 2017 are described below:

BALANCE SHEET

ASSETS	Note	2018	2017
Current			
Restricted short-term investments	(a)	-	224
Other assets (Advance to suppliers)	(b)	5,161	897
Total current assets		**5,161**	**1,121**
Noncurrent			
Court deposits	(c)	341,942	332,750
Deferred income tax	(d)	13,285	14,220
Total noncurrent assets		**355,227**	**346,970**

LIABILITIES	Note	2018	2017
Current			
Trade payables	(e)	(22,003)	(22,236)
Other provisions	(f)	(2,752,791)	(1,737,222)
Other liabilities (SEMAD)	(g)	(28,777)	(27,069)
Total current liabilities		**(2,803,571)**	**(1,786,527)**
Noncurrent			
Provisions for contingencies	(h)	(53,138)	(56,879)
Other provisions	(f)	(6,787,344)	(9,516,701)
Other liabilities (SEMAD / Contract related parties)	(g)	(3,920,292)	(1,852,226)
Total noncurrent liabilities		**(10,760,774)**	**(11,425,806)**
Net liabilities		**(13,203,957)**	**(12,864,242)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

SAMARCO

STATEMENT OF OPERATIONS

		2018	2017
Cost of goods sold and services rendered	(i)	(2,821)	(91,410)
Gross Loss		**(2,821)**	**(91,410)**
Operating expenses			
Provision funding for Fundação Renova by shareholders Vale/BHP		(2,091,011)	-
Reversal (provision) for social, environmental and socio-economic remediation		2,894,783	(4,500,728)
Expenses with social, environmental and socio-economic remediation	(j)	(146,602)	(566,529)
Reversal (provision) for contingency		851	-
Expenses input resources - Fundação Renova		-	(7,000)
Expenses with free services- Fundação Renova		(323)	(45,106)
Fines related to social, environmental and socio-economic remediation		-	(5,950)
Operational profit/(loss) before financial result		654,877	(5,216,723)
Interest on contingencies		(4,592)	-
Financial expenses provision for socioenvironmental and socioeconomic remediation		(1,227,167)	(797,428)
SEMAD interest		(6,572)	(10,476)
Financial result	(l)	(1,238,331)	(807,904)
Profit/loss before income tax		(583,454)	(6,024,627)
Deferred income tax		935	-
Loss for the year		**(582,519)**	**(6,024,627)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

STATEMENT OF CASH FLOWS

	2018	2017
Cash flows from operating activities		
Profit / Loss before tax	(583,454)	(6,024,627)
Adjustments to reconcile the loss to the cash provided by operations:		
Provision for other liabilities	(1,713,788)	4,042,811
Provisions for contingencies	(3,741)	(30,663)
Provision for asset impairment	-	(215,672)
(Increase) decrease in operating assets:		
Restricted short-term investments	224	11
Court deposits	(9,192)	(17,896)
Other assets	(4,264)	2,178
Increase (decrease) in operating liabilities:		
Trade payables	(233)	(221,618)
Other Liabilities	2,069,774	1,279,450
Net cash used in operating activities	**(244,674)**	**(1,186,026)**
Net cash used in investing activities	-	-
Net cash used in financing activities	-	-
Total net decrease in cash and cash equivalents	**(244,674)**	**(1,186,026)**

Preliminary Commitment (TCP) -
Creation of Emergency Security
On November 16, 2015 Samarco signed a Preliminary Commitment ("TCP") with the Prosecutor's Department of the state of Minas Gerais and the Federal Public Prosecutors' Office whereby Samarco created a "socioenvironmental guarantee/ surety fund" in the total amount of R$ 1,000,000, to be used exclusively to pay for measures to prevent, remediate, contain and redress socioenvironmental or socioeconomic damages caused by the Fundão dam failure.

Pursuant to this TCP, Samarco created a fund allocated to a specific remunerated account in the amount of R$ 500,000 and submitted guarantees of R$ 500,000.

The fund's resources will remain under Samarco's management, be overseen by the Prosecutor's Office and audited by an external auditor. However, the amount of R$ 500,000 allocated to this fund and deposited in a specific account, was required to be transferred to a judicial deposit account to satisfy a tax contingency related to the CFEM calculation base which bears no relation to the failure of the Fundão dam.

This transfer was based on a judicial decision rendered on December 11, 2015 in the tax enforcement proceedings pending at the 26th Federal Court of Minas Gerais. In March 2017 the Attorney General of the National Treasury (PGFN) filed a tax execution suit (25th Federal Court of Justice) demanding Samarco to pay an IRPJ debt (2000 to 2003 and 2007 to 2008). It demonstrated interest through a petition in the case records in the blocked amount of R$ 500,000, requesting the attachment of this amount in its favor based on an opinion of the AGU that establishes the preference of tax debts over all others, except labor claims. On July 28, 2017, the judge responsible for the tax execution of the IRPJ accepted the request, determining the attachment of this amount to guarantee payment of the IRPJ debt. On February 2, 2018, this amount was thus transferred to a judicial account at the disposition of the 25th Federal Court (IRPJ).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

At the same time, the independent audit contracted for the TCP certified that in November 2016, Samarco incurred expenditures in excess of R$ 1,000,000, thus fulfilling the purpose for which the fund had been created, and the object of this TCP. In September 2017 the Public Prosecutor of Minas Gerais moved to close the investigation.

The tax proceeding related to CFEM and IRPJ is detailed in note 19 (b).

(a) Restricted short-term investments
The amounts referred to herein are those which were not available for immediate use, such as the funds blocked by court order in proceedings directly related to the failure of the Fundão dam.

(b) Advances to suppliers
The amount of R$ 5,161 (R$ 897 at 31 December 2017) refers to advances made to suppliers related to the programs for water monitoring, recovery of infrastructure of the Risoleta Neves Hydropower Dam (Candongas reservoir) and hiring of consultancy and specialist services.

(c) Court deposits
The balance of judicial deposits is reported in the assets at the amount of R$ 341,942 (R$ 332,750 in 2017) and its composition is shown below:

	Parent and Consolidated	
	2018	2017
Civil	337,122	332,750
Environmental	3,660	-
Labor	1,160	-
Total	**341,942**	**332,750**

(d) Deferred income tax
The accounting impacts deriving from the dam's failure have been treated as temporary differences for tax purposes. The Company therefore reported a deferred income tax asset from these amounts, as shown below.

In line with the expectation of resumption of the operational activities of the Company (Note 1b), an analysis was made of the realization of the deferred income tax constituted in 2018.

With the understanding that the future fiscal profits subject to taxation at the rate of 25% would not be sufficient to support the use of the deferred income tax arising from the provision of socioeconomic and socioenvironmental remediation and the tax loss, the Company chose to not carry out the accounting recognition of the deferred income tax under these accounts.

	2018		2017	
	Calculation base	Income tax	Calculation base	Income tax
Provision for contingencies	53,138	13,285	56,879	14,220
		13,285		**14,220**

(e) Trade payables
This refers to amounts payable of R$ 22,003 at 31 December 2018 (R$ 22,236 at December 31, 2017) related to expenses arising from the failure of the Fundão dam.

(f) Other provisions
On March 2, 2016, Samarco and its stockholders Vale and BHP Billiton Brasil, signed the TTAC (Note 1(a)) as outlined in the case records of the public civil action brought by the Government Federal and others (No. 0069758-61.2015.4.01.3400), with the 12th Federal Court in Belo Horizonte, State of Minas Gerais, to establish the programs which determine the measures and actions to remedy and compensate for socio-environmental and socio-economic damages caused by the failure of the Fundão dam.

In addition to Samarco and its stockholders, the following are also parties to the Framework Agreement: (i) the Federal Government, the Brazilian Environmental and Renewable Natural Resources Institute ("IBAMA"), Instituto Chico Mendes de Conservação da Biodiversidade ("ICMBio"), National Water Agency ("ANA"), the National Department of Mineral Production ("DNPM"), Fundação Nacional do Índio ("FUNAI"); (ii) in Minas Gerais: the State of Minas Gerais, the State Institute for Forestry ("IEF"), the State Institute for Water Management ("IGAM"), the State Foundation for the Environment ("FEAM"); and (iii) in Espírito Santo: the State of Espírito Santo, the State Institute for the Environment and Water Resources ("IEMA"), the State Institute for Agribusiness and Forestry Protection ("IDAF") and the State Water Resource Agency ("AGERH").

The scope of the Framework Agreement comprises a total of 42 programs, of which: (i) 23 are of a social/economic nature;

and (ii) 19 are socio-environmental. These programs include both remediation and compensatory measures. The TTAC further provides for the possibility of creating new programs, to the extent required to implement the actions stipulated in the agreement.

The Framework Agreement has been structured such that government authorities will be able to comment, assess and approve the projects developed under the programs, and oversee the execution of all of the programs through an Interfederative Committee ("CIF"). Experts and advisory panels have also been appointed to settle technical disputes in a scientific, substantiated and expeditious manner.

The Framework Agreement established the creation of a private Foundation to develop and implement the programs, the management of which will be independently audited. The term of the Framework Agreement is 15 years counted from the data of its signing, renewable every year thereafter until all of the obligations outlined in the Framework Agreement are fulfilled.

Under the Framework Agreement, Samarco is responsible for funding the Foundation for the duration of the Framework Agreement. To the extent that Samarco fails to meet its funding obligations under the Framework Agreement, each of Vale and BHP Billiton Brasil has funding obligations under the Framework Agreement in proportion to their 50 per cent shareholding in Samarco.

For the year ended December 31, 2018, funding has been provided to the Foundation as follows:

- R$ 1,874,831 in 2017, of which R$ 581,881 was invested directly by Samarco in the TTAC programs, R$ 1,280,000 contributed by Vale and BHP Billiton Brasil, in the proportion of 50% each, through of deposits in the Foundation in the name of Samarco and R$ 12,950 by Samarco (R$ 5,950 related to the compensatory actions by means of the fine of the Candonga HPP - resolution No. 80 of the CIF and R$ 7,000 related to the release of part of the resource of the ACP Mariana).

- R$ 2,110,711 in 2018, of which R$ 19,700 was invested directly by Samarco in the TTAC programs, R$ 2,091,011 contributed by Vale and BHP Billiton Brasil, in the proportion of 50% each, through deposits to the Foundation on behalf of Samarco.

In 2019, the total input to be provided to the Foundation is R$ 2,320,000. From 2020 through 2021, annual contributions to the Foundation must be sufficient to cover the costs of the remediation and compensation programs for each year, with the annual reference amounts for these contributions being between R$ 800,000 to R$ 1,600,000.

These annual amounts are already included in the annual amount of R$ 240,000 for compensation projects over a period of 15 years, counting from the date of the signing of the TTAC on 02 March 2016. Additionally, a contribution of R$ 500,000 will be allocated to a program of sewage collection and treatment and disposal of solid waste in certain areas. From 2022 onwards, the amounts to be contributed to the Foundation will be based on planning of the programs approved by the Foundation on the same date. The Framework Agreement does not specify a minimum or maximum limit on contributions for this period.

On June 25, 2018, the Governance TAC was executed to provide for the settlement of a Public Civil Action of R$ 20,000,000, suspension of the Public Civil Action of R$ 155,000,000, partial ratification of the Framework Agreement and a formal declaration of its validity for the signing parties.

This agreement establishes, among other matters, Foundation governance enhancements to ensure a greater participation of the affected population and a process to deal with a possible renegotiation of the programs intended to remedy the Fundão dam failure, to be assessed following the conclusion of the work of specialists (Experts) hired by Samarco to advise the Federal Prosecutor's Office. The agreement was ratified on 08 August 2018 by the 12th Federal Court of Minas Gerais.

Based on the information above, Samarco management, following the advice of external consultants and experts, has been preparing action plans and studies for the future remediation of the environmental and socio-economic damage caused by the dam failure, in addition to the implementation of compensatory programs established in the Framework Agreement. At December 31, 2018, Samarco had recognized provisions at current prices for future disbursements related to the present obligation generated by the dam's failure. The magnitude, full scope, timing and costs of the future remediation programs are subject to significant uncertainty as they depend on the conclusion of expert studies, the preparation of action plans and the outcome of pending court cases.

The provision made was discounted to present value at (i) the risk-free rate of 8.3540 % per annum based on the 12-year Brazil bond in the international market maturing on January 5, 2024 obtained from Bloomberg (EJ137186) and (ii) considering cash outflow foreseen over the next 12 years, up to December 31, 2030.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(a) Break down

		2018	2017
Provision for :			
Remediation programs	(f.1)	3,858,342	7,616,117
Compensation programs	(f.2)	4,920,666	2,910,668
Other actions not included in the settlement	(f.3)	761,127	727,138
		9,540,135	**11,253,923**
Current liabilities		**2,752,791**	**1,737,222**
Noncurrent liabilities		**6,787,344**	**9,516,701**

(b) Changes

	2018	2017
Provision for social, environmental and socio-economic recuperation		
Balance on December 31	**11,253,923**	**7,211,112**
Realized provision	(146,602)	(566,529)
Financial update	1,227,167	797,428
Increase (decrease) of provision	(2,794,353)	3,811,912
Balance on December 31	**9,540,135**	**11,253,923**
Current liabilities	**2,752,791**	**1,737,222**
Noncurrent liabilities	**6,787,344**	**9,516,701**

In line with the evolution of actions and knowledge about the impacts, changes in key assumptions may result in future substantial changes in amounts accrued in future publications, including:

- Method of removal of remaining tailings in the rivers: the removal of remaining tailings in the flood plains, along river banks from Santarém to the beginning of the dam of Candonga (Risoleta Neves) will be mechanical, using typical earthmoving equipment, without the use of dredging. This method considers the cost of removal budgeted per cubic meter transported and hours worked of the loading and transport equipment of the tailings.

- Method of removal of remaining tailings in the dam of the Candonga HPP: the removal of the remaining tailings in the dam will be carried out by dredging, also including containment activities, as described below:

- Criteria for compensation of impacted population: The Mediated Indemnity Program began effectively in October 2016 with the purpose of developing and executing a compensation and indemnification program, through a coordinated negotiation, aimed at compensation and indemnifying those impacted. It considers the registration, analysis and indemnification, including:

  - Urban and private property;
  - Working conditions and individual income;
  - Fatality and missing people;
  - Fishermen, sand miners and small traders;
  - Individual entrepreneurs and micro entrepreneurs; and
  - For lack of water supply.

During 2018, R$ 595,725 (R$ 524,588 in 2017) were paid as compensation for damages caused by the failure of the Fundão Dam, of which R$ 348,835 (R$ 187,338 in 2017) in the Emergency Financial Aid program and R$ 246,891 (R$ 337,249 in 2017) for indemnification. For 2019, the amounts considered in the budget and already approved by the Foundation's Board of Trustees are: R$ 645,718 of Indemnification and R$ 365,819 in Emergency Financial Assistance.

- Compensation costs for the Candonga HPP in view of the reduction of its useful life or as needed for resuming operation.

(f.1) **Remediation programs:** these comprise measures and actions to remedy and/or repair the socio-environmental and socio-economic damages resulting from the dam failure, as set out in the Framework Agreement, whose main programs are: survey and registration of those impacted; protecting and enhancing the living standards of indigenous peoples; preservation of historical, cultural and artistic heritage; social communication, engagement and participation; reconstruction of Bento Rodrigues, Paracatu de Baixo and Gesteira; rehabilitation of other affected communities and infrastructure between Fundão and Candonga; assisting animals; emergency financial aid; reforestation and environmental recovery; conservation of aquatic biodiversity; management of resulting tailings, including in situ stabilization, excavation, dredging, haulage, treatment and disposal; improvement of water supply systems.

(f.2) **Compensation programs:** measures and initiatives to compensate for damages arising from the dam failure which are not applicable for mitigation or remediation, by improving socioenvironmental and socioeconomic conditions in affected areas, in accordance with the program set out in the Framework Agreement, whose main aspects are: supporting the research for the development and use of socioeconomic technologies applied to impact remediation; regional economic recuperation and diversification with incentives for industry; encouraging local contracting; rehabilitation of permanent protected areas (APP); recovery of springs; strengthening of screening structures and reintroduction of wildlife; collection and treatment of sewage and solid waste; environmental education and preparation for environmental emergencies.

(f.3) **Other actions not covered by the Framework Agreement:** other disbursements required to meet the cost of actions related to the Fundão dam failure but not covered by the TTAC programs.

(g) Other Liabilities
Samarco was assessed by SEMAD for R$ 127,500. Samarco requested the payment be made in 60 monthly installments. The first installment, corresponding to 5% (five percent) of the total, was paid in December 2016. On December 31, 2017, as detailed in note 21, the amount of R$ 28,777 (R$ 27,069 at December 31 of 2017) refers to 12 short-term installments and the amount of R$ 71,794 (R$ 94,738 at December 31, 2017) refers to the long-term installments, restated by SELIC.

On December 30, 2016, agreements were entered into between Samarco, Vale and BHP Billiton Brasil, in recognition of Samarco's obligation to pay its shareholders the amounts contributed by them to the Renova Foundation. The contributions are made to comply with the obligations set forth in the Framework Agreement (TTAC) signed with the State and Federal agencies. On December 31, 2018, the amounts contributed totaled R$ 3,848,499 (R$ 1,757,488 on December 31, 2017).

The information regarding the TTAC is detailed in note 3 (f).

(h) Contingencies
The Company is a party in legal and administrative proceedings involving civil, labor and environmental matters arising from the Fundão dam failure. These proceedings filed by individuals, private companies, NGOs and public and government entities seek remediation and compensation for environmental and socio-economic impacts, material/property and emotional distress damages and compensation for deaths, in addition to a wide range of indemnification actions brought by affected municipalities.

These lawsuits include public civil actions brought by State Public Prosecutors in Minas Gerais and Espírito Santo, State Public Defenders in Minas Gerais and Espírito Santo, Federal Prosecutors and defenders. In view of the status of all these proceedings, the duplicative nature of the damages sought in these proceeding and the R$ 20,000,000 and R$ 155,000,000 claims, which are detailed in the following paragraphs, it is not possible at this time to provide an overview of the possible outcomes or a reliable estimate of future exposure.

As defined in the Framework Agreement, the claims of several proceedings filed against Samarco are encompassed in this agreement. Any claims involving any matter established in the Framework Agreement should seek dismissal by resolution of substance or grouping together filed claims. As mentioned in item (f) above, the estimated losses for claims covered by the Framework Agreement have been included as part of the various provisions for the remediation and compensation of damages caused by the dam failure.

The Company received an assessment notice from environmental agencies, including IBAMA (Brazilian Environmental and Renewable Natural Resources Institute) due to the environmental damage caused by the discharge of solid and liquid waste (mining tailings) into the waters of the Doce river, and SEMAD (State Secretariat for Environment and Development) due to the environmental pollution and degradation resulting in damage to water resources. Samarco has submitted its defense against these charges and is waiting for a response from these entities. The assessment notices amount to R$ 898,253 (R$ 887,348 at December 31, 2017). Losses and resulting outflows are rated as possible.

In relation to the Public Civil Action No. 0043356-50.2015.8.13.0400 filed by the Public Prosecutor of Minas Gerais, seeking full compensation for the affected people of Mariana. A preliminary injunction froze an amount of R$ 300,000 in Samarco's bank account earmarked for compensation and remediation measures required under this Public Civil Action. Samarco appealed, however, on December 4, 2017, the Minas Gerais Court of Appeals denied the appeal and maintained the decision that froze said amount. The amount frozen has been partially released to pay for investments in emergency actions and remediation, upon agreement reached with the Public Prosecution of Minas Gerais. On October 2, 2018, Samarco, Vale, BHP Billiton Brasil and the Public Prosecutor of Minas Gerais signed an agreement to address the payment of damages in Mariana through the use of resources blocked in the preliminary injunction. Although the action was closed, the amounts originally blocked by this injunction will be used to pay part of the damages.

On November 30, 2015, the Federal Government of Brazil, the state governments of Espírito Santo and Minas Gerais and other public authorities filed a public civil action before the 12th Federal Court of Belo Horizonte against Samarco and its shareholders, Vale and BHP Billiton Brasil , seeking the creation of a fund of up to R$ 20,000,000 to add to the costs of clean-up and damages.

On May 3, 2016, the Federal Public Prosecutor filed a public civil action against Samarco and its stockholders seeking full compensation, indemnification and emotional distress in view of the environmental damages caused by the dam failure, demanding: (i) adoption of measures for mitigating the social, economic and environmental impacts caused by the failure of the Fundão dam and other emergency measures, (ii) payment of compensation to the community and (iii) payment of collective moral damage. The value of the initial action brought by the Federal Public Prosecution Service is R$ 155,000,000.

On January 18, 2017, the Federal Public Prosecution Service, Samarco and its stockholders signed a preliminary agreement ("TAP" or "Preliminary Agreement") with the Federal Prosecutors' Office in Brazil, which outlines the process and timeline for further negotiations towards a settlement of the R$ 20,000,000 and R$ 155,000,000 claims. The Preliminary Agreement provided for the appointment of experts to advise the Federal Prosecutors in relation to social and environmental remediation and the assessment and monitoring of programs under the Framework Agreement programs.

The conclusions of the expert advisors not subordinated to Samarco, VALE and BHP Billiton Brasil will be taken into account in the negotiation of a final settlement arrangement with the Federal Prosecutors.

Under the Preliminary Agreement, Samarco and its stockholders also agreed to provide an interim security ("Interim Security") totaling R$ 2,200,000, for the hiring of experts to advise the Federal Prosecutors, and for holding public hearings.

On January 24, 2017, Samarco, Vale and BHP Billiton Brasil provided the Interim Security to the Court, which will remain in effect for up to 30 months after the ratification of the Governance TAC. Following a series of extensions, on June 25, 2018, the parties reached an agreement in the form of the Governance TAC.

The Preliminary Agreement established in the Public Civil Action of Ponte Nova provides for the allocation of R$ 200,000 for remedial actions in that district. This amount was allocated to existing Foundation programs, and did not represent an increase in the allocation of resources forecast for 2018.

On June 25, 2018, Samarco, Vale and BHP Billiton Brasil, the other parties to the Framework Agreement, the Public Prosecutors Office and the Public Defense Office executed an arrangement which settles the Public Civil Action of R$ 20,000,000, enhances community participation in decisions related to programs under the Framework Agreement and establishes a process to renegotiate the programs over two years to progress settlement of the Public Civil Action of R$ 155,000,000 (Governance TAC).

Renegotiation of the programs will be based on certain agreed principles such as full reparation pursuant to Brazilian law, the requirement for a technical basis for any proposed changes, consideration of findings from experts appointed by the signatories to the TTAC, consideration of findings from experts appointed by Prosecutors and consideration of feedback from impacted communities. During the renegotiation period and up until revisions to the programs are agreed upon, the Foundation will continue to implement the Programs in accordance with the terms of the Framework Agreement and the Governance TAC.

The Governance TAC was ratified by the 12th Federal Court of Minas Gerais on August 8, 2018, settling the Public Civil Action of R$ 20,000,000 and suspending the Public Civil Action of R$ 155,000,000 for a period of two years from the date of ratification.

Under the Governance TAC, the Interim Security provided under the Preliminary Agreement is maintained for a period of 30 months under the Governance TAC, after which Samarco, Vale and BHP Billiton Brasil will be required to provide security of an amount equal to the Foundation's annual budget up to a limit of R$ 2,200,000.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

Management has also considered other claims classified as possible and/or probable which are at the initial stage and which pose significant uncertainties due to duplicative nature of the damages sought in those claims and the R$ 20,000,000 and R$ 155,000,000 claims, the definition of the amounts involved, compensation time-lapse, and other judicial and extrajudicial settlements.

Additional government proceedings and investigations related to the failure of the Fundão dam may be brought against the Company and its stockholders. Until further facts are available and the uncertainties mentioned above resolved, it is not possible to provide a range of potential outcomes or a reliable estimate of Samarco's obligations arising from such matters. As such, a provision has not been recognized or a contingent liability quantified for these potential claims. Only with time and natural development of disputes and maturity of the proceedings, with new settlements reached and/or legal decisions, will it be possible to understand the magnitude of the impacts and the Company's exposure. These items may result in significant impacts on the provisions and result in new adjustments to existing provisions and/or the recognition of new provisions for disbursements which cannot be currently projected and/or measured.

(i) Cost of goods sold and services rendered

The Company incurred costs to maintain and repair facilities affected by the failure of the tailings dam (related to outsourced services, construction materials and fuel, amongst other items). An amount of R$ 48,993 (R$ 66,755 at December 31, 2017) was recorded as idle capacity (Note 24).

(j) Other operating expenses

Expenses for socio-economic and socio-environmental recovery

The breakdown of expenses related to the measures seeking to prevent, remediate, contain and compensate environmental and social impacts caused by the dam failure, incurred in 2018 and 2017, is shown below:

	2018		2017	
	Incurred	Provisioned for	Incurred	Provisioned for
Remediation programs	19,734	3,858,342	415,836	7,616,117
Compensation programs	56	4,920,666	8,084	2,910,668
Actions not included in the TTAC	126,812	761,127	142,609	727,138
	146,602	**9,540,135**	**566,529**	**11,253,923**

The descriptions of the nature of each of the expenses included in the table above are detailed in Note 3(f).

(k) Financial Results

The financial result (income) is composed of: (i) financial expense R$ 1,227,167 (R$ 797,428 as of December 31, 2017) arising from the update of the socio-environmental and socioeconomic remediation provision, calculated at present value. The rate used is described in note 3 (f); (ii) R$ 6,572 (R$ 10,476 as of December 31, 2017) of interest incurred on the environmental penalty applied by SEMAD, as per note 3 (g); (iii) R$ 4,592 of interest on the provision for contingencies, as per Note 3 (h)).

(l) Investigations

Immediately after the failure of the Fundão dam, the Company, together with its stockholders, contracted an external investigation team to identify the causes of the failure. The results of the investigation were made public at the end of August 2016.

The results of the investigation were shared with the Federal Police and the Public Prosecution Service, among other entities involved in the investigation process. The results also provided input for the police investigations in progress as well as all judicial measures. The information will help the Company and the mining industry as a whole in their quest to establish higher standards of operational safety to prevent the occurrence of other events of a similar nature.

On October 22, 2016, the Federal Public Prosecution Service indicted the Company, its stockholders and 22 individuals, for the failure of the Fundão dam, under proceeding no. 0002725-15.2016.4.01.3822. The Company was charged with environmental crimes as outlined in articles 29, caput, §1, items I and II, § 4, items I, III, V and VI, art. 33, art. 38, art. 38-A, art. 40, caput, §2, art. 49, art. 50, art. 53, items I and II, sub items "c", "d" and "e", art. 54, § 2, items I, III, IV and V c/c art. 58, item I, art. 62, item I, all contained in Law n. 9,605/98, concomitantly with the crimes specified in articles 68, 69, and, twice, in art. 69-A, §2. of Law no. 9,605/98. The indictment was received on November 17, 2016. After a detailed analysis of documents and legal issues, related to the indictment, the Company presented a response within the legally established timeframe. The proceedings are still ongoing.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(m) Insurance
Following the failure of the Fundão dam on November 5, 2015 the Company has been actively negotiating with its contracted insurers to receive indemnity under its operational risk, general liability, and engineering risks policies, among others.

In 2018, the company obtained partial reimbursement of defense costs covered by the Directors' Civil Liability policy and maintains the channel of negotiations open so that additional amounts spent and covered by its insurance policies are reimbursed.

Any additional indemnity payments still depend on completion of the negotiations, definitions of coverages, deductibles and allocation of the amount of losses covered by the policies.

(n) Commitments
Following the failure of the Fundão dam on November 5, 2015, the Company invoked the force *majeure* clause in long-term contracts with suppliers and service providers to suspend contractual obligations, except for the electricity contract.

4. CASH AND CASH EQUIVALENTS

The balance of cash and cash equivalents is comprised as follows:

		Parent Company		Consolidated	
		2018	2017	2018	2017
Cash and bank deposits					
Domestic		34	1,439	34	1,439
Foreign	(a)	71,011	40,890	71,587	41,290
Financial investments					
Overseas	(b)	8,936	13,239	10,701	14,744
		79,981	**55,568**	**82,322**	**57,473**

(a) Current accounts are denominated in US dollars at financial institutions overseas.

(b) Short-term investments denominated in US dollars at overseas financial institutions, yields pegged to pre-fixed rates.

5. RESTRICTED SHORT-TERM INVESTMENTS

The Company's restricted short-term investments are as follows:

	Parent and consolidated	
Financial investment	2018	2017
Restricted cash	1,919	1,130
	1,919	**1,130**

As of December 31, 2018, the restricted cash value of R$ 1,919 refers to funds held and invested in specific collection accounts linked to certain bank loans and financing, which are undergoing a process of renegotiation of debt, and also to resources maintained to guarantee contractual obligations related to the transmission of energy.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

As of December 31, 2017, of R$ 1,130, R$ 906 related to funds held in collection accounts, R$ 224 was restricted by judicial determination as a result of the failure of the Fundão Dam (note 3 (a)), and the remaining amount refers to funds held to guarantee contractual obligations related to the transmission of energy.

6. ACCOUNTS RECEIVABLE

The accounts receivables comprise the following:

		Parent		Consolidated	
		2018	2017	2018	2017
Domestic clients	(a)	7,573	21,561	7,573	21,561
Domestic clients related parties		88	88	88	88
Foreign clients	(b)	10,277	16,926	11,855	18,304
Clients abroad related parties	(b)	1,561	1,362	-	-
Losses for credit for doubtful payments	(c)	(11,845)	(22,794)	(13,423)	(24,140)
		7,654	**17,143**	**6,093**	**15,813**

(a) The accounts receivable from clients in Brazil is related to the sale of energy, lease of port area, and sale of supply inventory, since the ore production activities are stopped.
(b) The consolidated balance of R$ 11,855 (R$ 18,304 in 2017) refers to the amounts receivable from ore buyers abroad.
(c) The estimated allowance for doubtful accounts of R$ 11,845 in 2018 for the parent company (R$ 22,794 in 2017), and R$ 13,423 (R$ 24,140 in 2017) for the consolidated balances is made based provisions for losses on the financial instrument corresponding to the expected credit loss of the 12-month period, in accordance with the policy disclosed in note 2.6. The provision made by the parent company does not include amounts receivable from sales made to the subsidiary Samarco Finance.

The Company's accounts receivable classified by aging are as follows:

	Parent Company		Consolidated	
	2018	2017	2018	2017
Not yet due	552	13,778	584	13,809
Up to 30 days overdue	534	375	534	375
31 to 60 days overdue	-	62	-	62
61 to 90 days overdue	15	-	15	-
Past due more than 90 days	18,398	25,722	18,383	25,707
	19,499	**39,937**	**19,516**	**39,953**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

7. INVENTORY

Inventory and changes in the balance are broken down as follows:

	Parent Company and Consolidated	
(a) Break down	**2018**	**2017**
Finished goods	2,939	1,263
Work in progress	11,158	7,410
Consumables	95,927	87,123
Consumption and maintenance materials	306,583	267,191
Provision for obsolescence of materials	(6,169)	(6,190)
Advances to suppliers	69	15
Total	**410,507**	**356,812**
Current assets	14,166	8,688
Noncurrent assets	396,341	348,124
Total	**410,507**	**356,812**

	Parent Company & Consolidated	
(b) Changes	**2018**	**2017**
Change in finished goods		
Balance on December 31	**1,263**	**197**
Additions (write-offs) for inventory adjustment	2,068	1,759
Translation adjustment	(392)	(693)
Balance on December 31	**2,939**	**1,263**

The Company appraised its inventory as of December 31, 2018, and concluded these did not exceed realization value.

Considering that there is no reliable estimate as to when and how Samarco can resume operations, the consumables were reclassified at long term inventory.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

8. RECOVERABLE TAXES

The balance of recoverable taxes is detailed below:

		Parent Company		Consolidated	
		2018	2017	2018	2017
ICMS – Minas Gerais	(a)	76,688	76,688	76,688	76,688
ICMS – Espírito Santo	(b)	1,490,668	1,492,353	1,490,668	1,492,353
Provision for ICMS losses - Espírito Santo	(b)	(1,490,668)	(1,492,353)	(1,490,668)	(1,492,353)
PIS and COFINS	(c)	8,886	20,397	8,886	20,397
Income tax recoverable	(d)	53,471	3,457	53,471	3,457
IRRF on short-term investment yields		9,275	9,274	9,275	9,274
Other		8,973	52,746	8,975	52,747
Total		157,293	162,562	157,295	162,563
Current assets		80,552	85,874	80,554	85,874
Noncurrent assets		76,741	76,688	76,741	76,689
Total		**157,293**	**162,562**	**157,295**	**162,563**

(a) These refer primarily to credits on the acquisition of property, plant and equipment.
(b) These refer to credits on the acquisition of property, plant and equipment, consumables, materials and other. In view of the history of non-realization of ICMS tax credits due from the state of Espírito Santo, the Company set up a provision to cover 100% of the credits.
(c) The PIS and COFINS credits are mostly related to the acquisition of material, consumables, energy, and property, plant and equipment, which are appropriated over 12 months at the rate of 1/12 per month. In 2018, only credits relative to the purchase of electric energy were appropriated, since operations are currently suspended.
(d) Recoverable income tax on overpaid monthly estimates.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

9. OTHER ASSETS

		Parent Company		Consolidated	
		2018	2017	2018	2017
Amount receivable for electricity	(a)	10,688	28,761	10,688	28,761
Advances to employees		4,590	5,056	4,590	5,054
Other		2,431	3,369	2,499	3,372
Current		**17,709**	**37,186**	**17,777**	**37,187**
COHESA	(b)	17,275	17,275	17,275	17,275
(-) Adjustment to Present Value COHESA	(b)	(2,182)	(1,238)	(2,182)	(1,238)
Advances to employees		286	951	286	951
Other		1,368	1,368	1,563	1,550
Noncurrent		16,747	18,356	16,942	18,538

(a) Refers primarily to the receipt of an indemnification for the difference between the contractual monthly energy and the measured energy, and to the sale of surplus electricity acquired for production, but not used.

(b) The Company transfers funds to COHESA (the Samarco Employees' Housing Cooperative) on the basis of an arrangement to implement a housing plan signed on March 1, 1994 to finance real estate properties for employees, with terms varying from eight to 25 years. The amounts lent will be received in full upon termination of the Samarco Housing Plan - PHS, i.e. upon full repayment of the financing by the employees. The COHESA balance receivable is adjusted to present value. The interest charged by COHESA is updated according to the collective pay rise awarded by the Company.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

10. INVESTMENTS

The Company reported earnings on equity interest of its subsidiaries of R$ 595 in 2018 (R$ 539 in 2017). In 2018, the Company did not receive dividends from investments in subsidiaries, where as in 2017 it received dividends totaling R$ 1,197). None of the investees have shares traded on stock exchanges.

	Interest	Number of shares or units	Current assets	Noncurrent assets	Total assets	Current liabilities	Equity	Total liabilities	Revenue	Costs and expenses	Net income for the year
2018											
Samarco Finance Ltd,	100%	50,000	1,765	-	1,765	1,578	187	1,765	16	-	16
Samarco Iron Ore Europe B,V	100%	180	17,618	4,609	22,227	4,278	17,949	22,227	5,293	(4,714)	579
		Total	**19,383**	**4,609**	**23,992**	**5,856**	**18,136**	**23,992**	**5,309**	**(4,714)**	**595**
2017											
Samarco Finance Ltd,	100%	50,000	1,504	-	1,504	1,347	157	1,504	-	35	35
Samarco Iron Ore Europe B,V	100%	180	14,440	3,844	18,284	3,499	14,785	18,284	4,700	(4,196)	504
		Total	**15,944**	**3,844**	**19,788**	**4,846**	**14,942**	**19,788**	**4,700**	**(4,161)**	**539**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

11. RELATED PARTIES

The main balances from transactions with related parties are detailed below:

		Stockholders		Subsidiaries		Parent Company		Consolidated	
		BHP Billiton Brasil	Vale	Samarco Finance	Samarco Europe	2018	2017	2018	2017
Current assets									
Accounts receivable	(a)	-	88	1,561	-	1,649	1,450	88	88
Noncurrent assets									
Trade payables	(b)	-	44,085	-	-	44,085	44,085	44,085	44,085
Plant, Property and Equipment	(c)	-	12,627	-	-	12,627	39,780	12,627	39,780
Current liabilities									
Trade payables (Note 14)		-	2,028	-	-	2,028	107	2,028	107
Other liabilities (commissions/ services payable) (Note 21)		-	-	-	17,196	17,196	13,351	-	-
Loans and Financing (Note 15)		1,856,056	1,856,055	-	-	3,712,111	2,512,940	3,712,111	2,512,940
Financial charges		41,477	41,477	-	-	82,954	40,444	82,954	40,444
Other liabilities (Note 21)		-	-	-	-	-	817	-	-
Noncurrent liabilities									
Dividends (Note 22)		1,402,774	1,402,774	-	-	2,805,548	2,805,548	2,805,548	2,805,548
Mineral rights (Nota 20)	(d)	-	112,222	-	-	112,222	112,222	112,222	112,222
Other domestic payables – Related parties	(e)	1,924,249	1,924,249	-	-	3,848,498	1,757,488	3,848,498	1,757,488
Statement of operations									
Revenue	(a)	-	1,373	-	-	1,373	-	1,373	-
Selling, general, administrative expenses		-	-	-	(5,136)	(5,136)	(4,700)	-	-
Other net operational expenses (income) (note 26)	(e)	(1,045,506)	(1,045,505	-	-	(2,091,011)	(1,280,000)	(2,091,011)	(1,280,000)
Finance expenses		(21,256)	(21,253)	-	-	(42,509)	(34,411)	(42,509)	(34,388)

(a) The balance of accounts receivable and revenue of the subsidiary Samarco Finance are for the sale of iron ore acquired from the Parent company and sold on the international market.

(b) Prepayment of R$ 44,085 to Vale for the partial lease of the mining rights of "Conta História Norte" and "Alegria" (mining exploration areas). Vale is responsible for the full maintenance of the rights up to the date of registration of the lease by the competent authority.

(c) Assets yielded to VALE on a commodatum basis.

(d) In November 1989, the Company and Vale signed a mining rights transfer agreement for exploitation of iron ore deposits, whereby Vale assigned and transferred to Samarco prospecting rights for two of its ore reserves.
The value of the contract considered the payment of the following amounts for mining rights: (i) lump sum of R$ 19,972, and (ii) variable payments equal to 4% of the gross value of the dividends paid by Samarco to its stockholders through depletion of the reserves.
The price agreed to in the agreement is not fixed, and was established as a percentage of the gross dividends paid out. For the years ended December 31, 2017 and December 31, 2018 there were no payments.

(e) Funds provided by shareholders Vale and BHP Billiton Brasil to the Foundation, as described in Note 3(f).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

Compensation of key management personnel
The compensation of key management personnel is as follows:

	2018	2017
Compensation (i)	4,979	9,205
Health care plan	47	57
Private pension	1,789	715
Life insurance	56	84
	6,871	**10,061**

(i) Includes wages, salaries, profit sharing, bonuses and severance pay.

Key management personnel are herein defined as members of the executive board and general managers.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

12. PROPERTY, PLANT AND EQUIPMENT

In 2018, as in 2017, the investments made corresponded to the current needs of the Company.

The Company's property, plant and equipment consist of the following:

		Consolidated									Parent Company
		Land	Industrial facilities (buildings, machinery and equipment)	Ore pipeline and correla-ted system	Decom-missioning of plant	Data processing equipment and furniture and fixtures	Vessels and vehicles	Tools, rotating assets and mass assets	Construction in progress	Total	Total
Cost											
Balance as of December 31, 2017		**203,530**	**14,452,558**	**7,878,095**	**94,647**	**220,953**	**480,976**	**273,506**	**99,467**	**23,703,732**	**23,702,439**
Additions	(a)	-	-	-	-	-	-	-	119,843	119,843	119,843
Provision for write-off (Guilman – Cemig)	(b)	-	(1,200)	(5,278)	-	-	-	-	-	(6,478)	(6,478)
Transfers - in	(c)	778	37,519	14,665	-	11,165	17,324	14,427	-	95,878	95,878
Transfers - out		-	(19,338)	(3)	-	-	(12,184)	(2,659)	(61,694)	(95,878)	(95,878)
Non onerous transfer – out	(d)	(203)	(83,496)	-	-	-	-	-	-	(83,699)	(83,699)
Sales		-	(245)	-	-	(104)	(7)	(15)	(5,414)	(5,785)	(5,785)
Effect of exchange rate changes	(e)	35,071	2,396,380	1,352,405	(50,795)	40,326	83,560	48,796	3,221	3,908,964	3,908,721
Balance as of December 31, 2018		239,176	16,782,178	**9,239,884**	**43,852**	**272,340**	**569,669**	**334,055**	**155,423**	**27,636,577**	**27,635,041**
Accumulated depreciation											
Balance as of December 31, 2017		-	(4,128,700)	**(1,534,829)**	**(26,445)**	**(146,173)**	**(219,322)**	**(71,997)**	-	**(6,127,466)**	**(6,126,333)**
Depreciation for the year		-	(121,015)	(5,960)	(4,381)	(16,498)	(25,677)	(8,873)	-	(182,404)	(182,283)
Provision for write-off (Guilman – Cemig)	(b)	-	163	856	-	-	-	-	-	1,019	1,019
Transfers - in	(c)	-	(3,912)	(1)	-	-	(3,837)	-	-	(7,750)	(7,750)
Transfers - out		-	3,913	-	-	-	3,837	-	-	7,750	7,750
Sales		-	129	-	-	99	6	9	-	243	243
Effect of exchange rate changes	(e)	-	(804,481)	(259,560)	(2,652)	(34,290)	(53,244)	(19,037)	-	(1,173,264)	(1,173,024)
Balance as of December 31, 2018		-	**(5,053,903)**	**(1,799,494)**	**(33,478)**	**(196,862)**	**(298,237)**	**(99,898)**	-	**(7,481,872)**	**(7,480,378)**
Balance											
As of December 31, 2017		203,530	10,323,858	6,343,266	68,202	74,780	261,654	201,509	99,467	17,576,266	17,576,106
As of December 31, 2018		239,176	11,728,275	7,440,390	10,374	75,478	271,432	234,157	155,423	20,154,705	20,154,663

(a) During the year 2018, the additions resulted in an amount of R$ 119,843 (2017 R$ 51,463). Of the additions, one should highlight the main projects as of December 31, 2018: disposal of tailings at Cava de Alegria Sul R$ 34,108, lands R$ 24,764, reinforcement of the dikes of Macacos and Oficina, R$ 19,601, structural recovery "Ubu" R$ 8,803 and dewatering system for sandy tailings and slimes R$ 3,021.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The breakdown of the additions by nature were as follows:

	Start	End	2018	2017
PCN replacement of tailings in pit	2016	2018	34,108	5,299
Real estate	2018	2018	24,764	-
Improvements in Macacos dike and workshop	2018	2018	19,601	-
Structural recovery Ubu	2018	2018	8,803	-
Sandy tailings and slime dewatering system	2018	2018	3,021	-
Restart of concentrator 2	2018	2018	2,830	-
Improvements on Matipo dam	2018	2018	2,788	-
Water/environmental prerequisite	2018	2018	2,334	-
Spare parts Germano/ Ubu	2014	2018	2,119	12,839
Mine planning software	2018	2018	1,954	-
Adjustments North Da,	2018	2018	1,718	-
Muniz Freire dam	2018	2018	1,606	-
Capital expenditures Guilman Amorim HPP	2016	2018	951	1,812
Protection boundaries Samarco properties	2018	2018	440	-
Electrical center for automation, instrumentation	2017	2018	311	676
Purchase accelerometer and seismometers	2017	2018	179	374
Renovation expansion of Germano restaurant	2013	2018	46	307
Purchase of hydrogeology equipment	2017	2018	29	399
Installation of logical blocking system	2017	2018	16	472
Acquisition of gmu tools (necessary for internalizations)	2016	2018	14	812
Automation of stockpiling and outloading operations	2014	2017	-	6,035
Radars for monitoring of structures	2017	2017	-	5,759
Purchase inclinometers saa	2017	2017	-	2,696
Impermeabilization of channel of João Manoel pile	2017	2017	-	2,090
Purchase of land – Candonga F1	2016	2017	-	1,916
Stabilization plan for industrial embankments	2016	2017	-	1,830
Installation instruments dams	2017	2017	-	1,168

>> TO BE CONTINUED

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

>> CONTINUATION

	Start	End	2018	2017
Instrumentation and automation instruments	2017	2017	-	1,100
Shortening of cv02	2017	2017	-	1,011
Purchase and construction of drainage structures for mining and waste dump areas	2016	2017	-	328
Improvements in access to customs area and data integration	2016	2017	-	163
Continued implementation of critical risk management projects	2016	2017	-	104
Overhaul of precipitator 06fe003 of plant 3	2016	2017	-	64
New offloading area for beneficiation consumables	2014	2017	-	11
Other			12,211	4,198
Total			**119,843**	**51,463**

(b) Provisions for transfer, free of payment, of assets related to substation 230kV, installed at the HPP of Guilman Amorim, a consortium. The assets will be transferred to CEMIG – Companhia Energetica de Minas Gerais S.A. as a result of a legal requirement.
(c) The investments in property, plant and equipment and intangible assets are recorded in construction in progress. Once these investments are concluded and go into operation, the assets are transferred to the respective accounts of property, plant and equipment and intangible assets, depending on the accounting nature of each item.
(d) Transfer, free of payment, to Furnas of the substation 345k Barro Branco, as pursuant to Resolution n.º 2,260/10 of ANEEL.
(e) The effect of the exchange rate changes resulted from translating the financial statements from the functional currency (US dollars) to the reporting currency (Real).

12.1 Impairment analysis

Due to the suspension of the Company's operations in Mariana because of the failure of the Fundão dam, Samarco identified indicators that certain fixed assets could be being recognized in the books at values above the recoverable value and thus carried out an impairment test during the period.

The assets' recoverable values were assessed based on projected cash flows, considering the integrated operations of the Company to be a single cash generating unit. Cash flow projections were made based on: (i) estimated useful life of the mines; (ii) assumptions and budgets approved by management for the period corresponding to the estimated useful life; (iii) discount rate derived from the methodology used to calculate the weighted average cost of capital - WACC; (iv) market projections for exchange rates (Real/US Dollar); (v) market projections for price quotes of iron ore pellets (BF and DR). In order to calculate the impairment, were considered the amounts recorded in property, plant and equipment and intangible assets.

The main assumptions used in the cash flow projections to determine the value in use of the cash generating unit were: WACC of 11.3%; average exchange rate for 2019 of R$ 3.86, rising to R$ 4,11 in the long term; average price of BF and DR pellets, as per the Platts index and pellet premium projected by market analysts and international marine freight references.

When testing its noncurrent nonfinancial assets for impairment based on projected cash flows as of December 31, 2018, the Company did not identify the need to make a provision for asset impairment.

Currently, insufficient cash resources to meet the Company's obligations, as well as the uncertainties as to when it will resume its operations, raise significant doubts about the Company's ability to continue to operate as a going concern (Note 1).

12.2 Residual value

Useful lives of assets are optimized as far as possible by carrying out preventive and corrective maintenance. This policy enables the Company to maintain its assets in an appropriate state of repair and operate for lengthy periods of time until they become effectively obsolete or are to be scrapped. As such, there is no expectation of recovering values in the sale of fixed assets, and their residual values are insignificant.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

12.3 Pledged assets

At December 31, 2018, the Company had assets pledged as collateral in judicial proceedings. These assets are recorded under Property, Plant and Equipment as machinery and equipment, real estate property, vessels and related systems, the net book value for which is R$ 2,160,292 (R$ 3,139,517 in 2017). For 2018, there was a decrease in the fixed assets provided as collateral as per the lawsuits associated with the failure of the Fundão tailings dam (TAC MP/MG) as informed in note 3(h), in the amount of R$ 468,079 and tax contingencies related to IRPJ/IRRF in the amount of R$ 441,795.

12.4 Useful life

In accordance with technical pronouncement CPC 27 - Property, Plant and Equipment, in 2018 the Company concluded its review of the useful lives of its property, plant and equipment. There were no changes to the expected use of the asset, which is assessed based on physical production or capacity expected of it. There were therefore no changes to the standard uses of Samarco's property, plant and equipment in 2018, i.e. the useful lives are compatible with the expected benefit of the industrial complex.

Below is a summary description of the property, plant and equipment accounts and the useful life by accounting item used to calculate depreciation, based on the units produced method for the items directly related to the respective production areas and based on the straight-line depreciation method for the rest:

		2018		2017	
Item	**Account description**	**Average weighted useful life in years**	**Years of depreciation**	**Average weighted useful life in years**	**Years of depreciation**
Buildings	Buildings, warehouses, security cabins, road surfacing and civil works improvements.	29	10 to 50	30	10 to 50
Machinery and equipment	Furnace, pelletizing disks, ship loader, loaders, precipitators, ball mills, grate cars and other such items.	18	10 to 50	19	10 to 50
Ore pipeline and correlated system	Pipelines to transport iron ore and industrial fixtures, such as conveyor belts, cabling and others.	16	20 to 43	17	20 to 43
Plant decommissioning	Environmental obligations to discontinue the slurry pipeline and industrial facilities of Germano and Ubu.	37	43	38	43
Data processing equipment	Personal computers, printers, monitors, Notebooks, servers, optical interfaces, collectors, switches, hubs, patch panels, racks, etc.	3	5	4	5
Furniture and fixtures	Chairs, tables, cupboards and other such furniture.	6	10	7	10
Vessels	Boats, ferries, speedboats and dredgers.	15	9 to 24	16	9 to 24
Vehicles	Automobiles, trucks, stackers, cranes, tractors, loaders.	8	4 to 25	9	4 to 25
Tools	Impact keys, multimeter, torque wrenches, microscopes, and other small devices.	8	10 to 25	8	10 to 25
Rotating assets	Parts of machinery and equipment and industrial facilities.	20	10 to 27	21	10 to 27
Mass assets	Circuit breakers, capacitors, hydraulic pumps and other small items.	16	5 to 24	17	5 to 24

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

13. INTANGIBLE ASSETS

The intangible assets are broken down as follows:

		Consolidated								Parent Company
		Right of way	Mining rights	Other rights	Tailings removal	Right of use - power grid 345kv	Applications and software	Construction in progress	Total	Total
Cost										
Balance as of December 31, 2017		**27,944**	**41,838**	**1,906**	**25,534**	**-**	**163,651**	**1,719**	**262,592**	**262,586**
Additions	(a)	-	-	-	-	-	-	763	763	763
Non onerous transfer - in	(b)	-	-	-	-	83,699	-	-	83,699	83,699
Transfers - in		157	-	-	-	475	2,182	-	2,814	2,814
Transfers - out		-	-	-	-	-	-	(2,814)	(2,814)	(2,814)
Effect of exchange rate variance	(c)	4,796	7,170	326	4,376	69,407	28,531	335	114,941	114,938
Balance as of December 31, 2018		32,897	49,008	**2,232**	**29,910**	**153,581**	**194,364**	**3**	**461,995**	**461,986**
Accumulated amortization										
Balance as of December 31, 2017		(9,893)	(28,917)	**(1,906)**	**(9,032)**	-	**(132,022)**	-	**(181,770)**	**(181,764)**
Amortization in the period	(d)	(299)	(163)	-	(1,771)	-	(8,820)	-	(11,053)	(11,053)
Effect of exchange rate changes	(c)	(2,031)	(5,220)	(326)	(2,692)	-	(27,377)	-	(37,646)	(37,643)
Balance as of December 31, 2018		**(12,223)**	**(34,300)**	**(2,232)**	**(13,495)**	**-**	**(168,219)**	**-**	**(230,469)**	**(230,460)**
Balance as of December 31, 2017		**18,051**	**12,921**	**-**	**16,502**	**-**	**31,629**	**1,719**	**80,822**	**80,822**
Balance as of December 31, 2018		**20,674**	**14,708**	**-**	**16,415**	**153,581**	**26,145**	**3**	**231,526**	**231,526**

(a) The investments and expenditures to be recorded in intangible assets are initially recorded as Construction in progress, under Property, plant and equipment. Once these investments are concluded and go into operation, the assets are transferred to the respective accounts of intangible assets, depending on the accounting nature of each item.
(b) Transfer, free of payment, to Furnas of the substation 345k Barro Branco, as pursuant to Resolution n.º 2,260/10 of ANEEL
(c) The effect of the exchange rate changes resulted from translating the financial statements from the functional currency (US dollars) to the reporting currency (Real).
(d) For the easements and mining rights, amortization of the intangible assets is calculated according to the expected useful life of the iron ore mines owned by the Company. The straight-line method is applied to the others.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

13.1 Useful life

Below is a summary description of the intangible asset accounts and the useful life by accounting item:

		2018		2017	
Item	Account description	Average weighted useful life in years	Years of depreciation	Average weighted useful life in years	Years of depreciation
Easements	Rights acquired to use the easement on the ground to lay the slurry pipeline.	34	43	35	43
Mining rights	Mining rights for exploration of iron ore deposits.	35	43	36	43
Tailings removal	Cost of removing tailings, incurred in surface mine during production.	21	25	21	25
Right to basic grid LT 345KV	Right to use/connection to basic grid LT 345KV.	25	25	-	-
Applications and software	Software and licenses.	4	5	4	5

13.2 Research and development

The Company incurred research and development expenses of R$ 27,471 (R$ 36,049 in 2017), which were recognized as other net operating expenses in 2018 (Note 26).

14. TRADE PAYABLES

	Parent Company		Consolidated	
	2018	2017	2018	2017
Domestic customers	70,316	41,811	70,332	41,815
Overseas customers	4,095	887	4,095	903
Related-party transactions (Note 11)	2,028	107	2,028	107
	76,439	**42,805**	**76,455**	**42,825**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

15. LOANS AND FINANCING

Loans and financing are instruments used by the Company to finance its projects and various needs.

With the halt of its operating activities, the Company was unable to comply with certain obligations contained in its loan and financing agreements. As a consequence of these non-compliances, all loans and financing were reclassified to short term, reflecting an increase in the amounts of interest provision as per the existing terms of the loan and financial agreements.

		Parent & consolidated current	Total	Total
			2018	2017
Overseas loans and financing	Bonds	8,488,689	8,488,689	7,238,197
	EPPs (export pre payments)	6,183,223	6,183,223	5,278,610
Local loans and financing	BNDES FINAME	139,323	139,323	139,323
	Mutual Petrobras	6,881	6,881	6,931
	DEBENTURES (related parties)	3,712,111	3,712,111	2,512,940
Total		**18,530,227**	**18,530,227**	**15,176,001**
Current		**18,530,227**	**18,530,227**	**15,176,001**

In 2018, the Company entered into loan agreements with its shareholders Vale and BHP Billiton Brasil through issues of private, non-convertible debentures, with the 7th and 9th issues being executed with BHP Billiton Brasil and the 8th and 10th issues with Vale. The issues of Vale and BHP have identical conditions regarding value, term (1 year) and interest (LIBOR plus 1.15% per year). Of the total amount of R$ 666,560 issued in 2018:

(i) R$ 266,865 refer to issues 7 and 8 with maturity on January 26, 2019. On this date, they were renegotiated with new maturity on January 26, 2020 and a total amount of R$ 294,556;

(ii) R$ 399,695 refers to the 9th and 10th issues with maturity on July 20, 2019.

In 2018, some issues also matured and all of them were renegotiated, with their maturities extended for another year:

- 1st and 2nd issues, executed in 2016 with BHP Billiton Brasil and Vale respectively, mature on August 2, 2018 and were renegotiated with new maturity on August 2, 2019 and total amount of R$ 1,104,894.
- 3rd and 4th issues celebrated in 2017 with BHP Billiton Brasil and Vale respectively, matured January 3, 2019 and were renegotiated with new maturity on January 3, 2020 and a total amount of R$ 1,326,612.
- 5th and 6th issues in 2017 with BHP Billiton Brasil and Vale respectively, matured on July 12, 2018 and were renegotiated with new maturity on July 12, 2019 and a total amount of R$ 583,038.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

As of December 31, 2018, the provision for interest on loans and financing in foreign currency, which represented 79.2% of total loans and financing (82.5% in 2017), was as follows:

	Parent Company and Consolidated			
	2018		2017	
Interest rate (per annum)	Principal value	Provision for interest	Principal value	Provision for interest
0% to 2 %	-	-	1,607,396	72,836
2% to 3%	-	-	3,671,214	182,911
3% to 4%	5,698,948	492,892	-	-
Above 4%	8,972,964	1,248,395	7,238,197	695,284
	14,671,912	**1,741,287**	**12,516,807**	**951,031**

As of December 31, 2018, the provision for interest on local currency loans and financing, which accounted for 20.8% (17.5% in 2017) of interest on total loans and financing, was as follows:

	Parent Company and Consolidated			
	2018		2017	
Interest rate (per annum)	Principal value	Provision for interest	Principal value	Provision for interest
2% to 3%	-	-	2,376,981	40,138
3% to 4%	3,742,940	95,968	275,282	8,653
Above 4%	115,375	7,073	6,931	5,457
	3,858,315	**103,041**	**2,659,194**	**54,248**

Certain loans in local currency (debentures) have their interest rates pegged to LIBOR.

The average cost of the total debt in 2018, including foreign currency loans and financing, is 4.4% p.a. and in local currency was 3.6% p.a. (the consolidated cost in 2017 was 3.6% p.a.).

Guarantees and obligations - loans and financing
As a result of the interruption of the Company's operations, since the Fundão dam failure, certain covenants in loan and financing agreements have not been met, such as the debt ratio (Net Debt/EBITDA limited to 4:1). In addition, the Company ceased to pay principal and interest on loans due in the year.

For the calculation of Net Debt/EBITDA, the Company uses an adjusted EBITDA as a basis for calculation of financial covenants, in accordance with the definitions included in the various contracts with lenders. Extraordinary non-cash gains and losses, such as provisions, are excluded for this criterion, in order to reflect the expectation of cash generation based on EBITDA, thereby evaluating the Company's financial health and liquidity and its capacity to repay the entire debt in a given period.

The Company has hired J.P. Morgan to act as its financial advisor in the renegotiation of its debt. The discussions with its creditors, banks and bondholders are in progress.

Class Action Complaint
On November 14, 2016, a putative class action complaint was filed in the U.S. District Court for the Southern District of New York on behalf of all purchasers of Samarco's 10-year bond Notes due 2022, 2023 and 2024 bought between October 31, 2012 and November 30, 2015, against Samarco and its former chief executive officer. The complaint is presented under U.S. federal securities laws and indicates that the plaintiff will seek certification to proceed as a class action.

On March 6, 2017, the putative class action complaint was amended to include BHP Group Ltd, BHP Group Plc, BHP Billiton Brasil Ltda, and Vale S.A. as well as Samarco officers, including four members of its Board of Directors, which is formed by representatives of Vale and BHP Billiton Brasil. On April 5, 2017, the complaint by Safra against natural persons was withdrawn, keeping in effect only the actions related to corporate entities (Samarco, Vale and BHP Billiton Brasil).

On August 31, 2017, there was a motion to dismiss the amended complaint, developed jointly by Samarco, Vale and BHP Billiton Brasil. Currently this motion to dismiss is awaiting a decision of the judge in order to allow the definition of the next steps (continue with the lawsuit or dismiss the complaint).

The amount of damages sought by the plaintiffs on behalf of the putative class is unspecified. Given the preliminary status of this action, it is not possible at this time to provide a range of possible outcomes or a reliable estimate of potential future exposures to Samarco.

16. EMPLOYEE BENEFITS

16.1 Retirement benefits
Samarco sponsors Fundação Vale do Rio Doce de Seguridade Social (ValiaPrev), a multi-sponsor, multi-plan entity managing benefit plans with segregated assets and providing participants and their dependents with benefits supplementary, or similar, to Official Basic Social Security benefits, The plan is a defined-contribution plan and offers the following benefits:

- Normal retirement income.
- Early retirement income.
- Supplementary disability retirement.
- Supplementary pension for death.
- Pension income for death.
- Deferred benefit income for severance.
- Supplementary annual bonus.
- Annual income bonus.
- Redemption.

(a) Defined-contribution plan
The plan is supported by regular contributions precisely matching participant contributions and limited to 9% of the amount by which contribution salaries exceed ten reference plan units, as well as by contributions to support risk benefits (disability and death at work and annual bonus) and plan administration expenses.

During 2018 the Company made contributions to the defined contribution plan of R$ 7,838 (R$ 6,030 in 2017).

(b) Defined-benefit plan portion
The cost and obligations related to the pension benefits offered to its employees when they retire, based on a specific actuarial appraisal report.

The actuarial appraisal report calculated the retirement benefits considering the definitions contained in the regulations that concern eligibilities, benefit formulas and means of readjustment.

The actuarial report appraised the defined-benefit portion in the plan, which denotes the constructive obligation referring to supplementary retirements, pension for death and annual bonus, denominated Risk Plan and retirement income.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

1 – Change in present value of the obligations

	2018	2017
Present value of the actuarial liability at the beginning of the year	37,449	34,234
Current service cost	584	711
Interest on actuarial obligation	3,589	3,676
Actuarial (gains)/losses - experience	5,522	(484)
Actuarial (gains)/losses - demographic assumptions	(632)	-
Actuarial (gains)/losses - financial hypothesis	1,961	2,679
Benefits paid by the plan	(3,346)	(2,897)
Previous service cost - plan shortening	-	(470)
Present value of the actuarial liability at the end of the year	**45,127**	**37,449**

2 – Change in fair value of the assets

	2018	2017
Fair value of assets at start of year	77,525	73,136
Real return on investments	11,816	6,535
Contributions paid by the Company	557	751
Benefits paid by the plan	(3,346)	(2,897)
Fair value of assets at end of year	**86,552**	**77,525**

3 – Change in unrecoverable surplus

	2018	2017
Unrecoverable surplus at end of previous year	40,076	38,901
Interest on unrecoverable surplus	3,980	4,326
Change in unrecoverable surplus during period	(2,629)	(3,152)
Unrecoverable surplus at end of current year	**41,427**	**40,075**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

4 – Costs of defined benefit

4.1 – In results for the year	2018	2017
Current service cost of the Company	584	240
Net interest of net liabilities/(assets)	(36)	(72)
Cost of defined benefit in results	**548**	**168**

4.2 – Other comprehensive income (ORA)	2018	2017
Actuarial gains(losses) of change in liabilities	5,522	(484)
Actuarial gains(losses) of changes in hypothesis	1,329	2,679
Actuarial gains(losses) arising in the period	6,851	2,195
Yields on plan assets (greater)/smaller than discount rate	(4,212)	1,539
Change in unrecoverable surplus	(2,630)	(3,152)
Re-measurement of effects on Other comprehensive income	**9**	**582**

4.3 - Cost of defined benefit	2018	2017
Current service cost	584	240
Net interest on net value of liabilities/(asset)	(36)	(72)
Remuneration of effects recognized in ORA	9	582
Cost of defined benefit	**557**	**750**

5 – Change in net liability/asset

5.1 – Net liability/assets	2018	2017
Present value of obligation (VPO)	(45,127)	(37,449)
Fair value of the assets	86,553	77,524
Net total (liability)/assets to be recognized	**41,426**	**40,075**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

5.2 – Reconciliation in net total (liability)/assets	**2018**	**2017**
Net total (liability)/asset at beginning of year	-	-
Service Cost	(584)	(240)
Net interest on net value of liabilities/(asset)	36	72
Remuneration of effects recognized in ORA	(9)	(582)
Contributions paid by the Company	557	750
Net total (liability)/asset at end of year	**-**	**-**

6 – Estimated cost of defined benefit for 2019

Current service cost	427
Net interest of net liabilities (assets)	(15)
Cost to be recognized in profit or loss	**412**

7 – Expected cash flows for 2019

Company contributions	314
Benefits paid by the plan	3,165

8 – Actuarial assumptions

	2018	**2017**
Economic		
Discount rate	5.68%	6.27% p.a.
Salary growth rate	6.34% p.a.	6.95% p.a.
Inflation	4.25% p.a.	4.85% p.a.
Benefits growth	4.25% p.a.	4.85% p.a.
Return on noncurrent assets	9.93% p.a.	11.12% p.a.
Demographic		
Mortality table	AT-2000 (H)	AT-2000 (H)
Mortality table of disabled people	CSO-1980	AT-2000 (H)
Disability rate table	RGPS 1992-2002 0.55	RGPS 1992-2002 0.55
Turnover rate	0% up to 55	3% up to 55
% of active participants married at retirement	100%	95%
Age difference between participant and spouse	Wives are 5 years younger than husbands	Wives are 4 years younger than husbands

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

9 - Summary of participants´ data

	2018	2017
Active and self-sponsored employees		
Number	1,231	1,340
Average age	40.42	39.41
Average length of service (years)	11.85	10.92
Annual average payroll	84,951	84,394
Participants with assisted benefits		
Number	119	110
Annual average payroll	28,114	25,292

10 – The plan's assets are as follow:

Assets by category	2018	2017
Fixed income	652,768	579,405
Variable income	104,309	89,565
Loans	21,664	27,540
	778,741	**696,510**

16.2 Other employee benefits

The Company offers employee benefits through a health care plan (self-managed and contributed to by employees for co-participation in expenses incurred), Assistência Médica Supletiva ("AMS"), which also covers dependents. The plan provides outpatient, inpatient and dental care as well as medication for beneficiaries and is covered by a Collective Labor Agreement. Plan management fees are fully borne by the Company. Expenses on other benefits were recognized in the statement of operations as follows:

	Parent Company		Consolidated	
	2018	2017	2018	2017
Compensation and charges	(122,332)	(186,051)	(124,152)	(188,568)
Social security charges	(28,960)	(33,317)	(28,960)	(33,317)
Retirement plan benefits	(8,444)	(6,552)	(8,504)	(6,631)
Meal vouchers	(10,265)	(16,145)	(10,265)	(16,145)
Health insurance	(14,632)	(20,035)	(14,635)	(20,038)
Other	(19,617)	(22,140)	(19,800)	(22,433)
	(204,250)	**(284,240)**	**(206,316)**	**(287,132)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

16.3 Share-based payments

In 2011, the long-term incentive plan (ILP) was implemented in order to attract, retain and share the growth of Samarco with its executives. The quota of theoretical actions (phantom stocks) granted to the participant is based on a formula that takes into account a multiple of the participant's annual salary, calculated according to the regulation of the plan. The theoretical shares become exercisable on the third anniversary of the grant date. The Company may at any time amend its regulations, suspend or terminate the plan.

The theoretical actions are extinguished when the participant disconnects from the Company, either on the initiative of the participant or the participant. If a participant is dismissed for just cause, retires, dies or becomes permanently incapacitated, under certain conditions his theoretical options may become exercisable in proportion to the period between the date of grant and the date of termination of his employment contract. The Remuneration Committee determines, in its sole discretion, the rights of executives and key professionals with respect to their theoretical actions in case of dismissal for reasons not provided for in the regulation of the long-term theoretical stock plan. In addition, the Remuneration Committee may, at any time and in its sole discretion, amend the regulation, suspend or terminate the long-term theoretical stock plan.

The fair value at the grant date of the theoretical shares was calculated based on Monte Carlo sampling. The expected volatility is estimated by considering the volatility of the average historical price of the shares of our Vale shareholder in the market, considering a term of three years.

As a result of the losses generated in 2018 and 2017, the value of the share is equal to zero, consequently, there were no payments in the respective years.

17. PAYROLL, PROVISIONS AND "SOCIAL CONTRIBUTIONS" (TAXES)

The balance of payroll, provisions and contributions is shown below:

	Parent Company		Consolidated	
	2018	2017	2018	2017
Provision for vacations	16,696	17,492	16,809	17,553
Employees INSS	3,163	2,472	3,163	2,472
FGTS payable	514	791	514	791
Other	929	655	932	657
	21,302	**21,410**	**21,418**	**21,473**

Since the failure of the Fundão dam, Samarco has made an effort to retain its employees, by providing paid vacation, collective vacation leave and three stays or furloughs (called a "layoff" in Brazil and understood as a temporary suspension of the employment agreement while providing professional skills training). In addition, it eliminated 1,800 positions through a Voluntary Dismissal Program (PDV) and PDI – Involuntary Dismissal Program, agreed with the respective unions in Minas Gerais and Espirito Santo. This downsizing seeks to conform to the needs of a future resumption of operations at 26% of its production capacity.

In 2018, while still maintaining efforts to hold on to its workforce, Samarco proposed to maintain employee benefits and not grant raises on their base date, which means February 2018 for the seamen and September 2018 for the steel workers. These measures were approved in meetings held by the respective unions of Minas and Espirito Santo.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

18. TAXES PAYABLE

The balance of taxes payable is shown below:

		Parent Company		Consolidated	
		2018	2017	2018	2017
ICMS payable		9,062	9,097	9,062	9,097
ICMS DIFAL payable		210	178	210	178
REFIS - Tax recovery – taxes paid in installments	(a)	217,591	208,440	217,591	208,440
IRRF on interest and remittances abroad	(b)	203,018	114,631	203,018	114,631
IRRF payable		2,611	2,791	2,651	2,896
ISS withheld		935	872	935	872
INSS retained from third parties payable		1,058	925	1,058	925
Installment plan ISS Anchieta	(c)	-	12,251	-	12,251
PIS/COFINS on financial income		3,701	3,826	3,701	3,826
Others		3,060	10,612	3,058	10,612
Total		**441,246**	**363,623**	**441,284**	**363,728**
Current liabilities		240,199	169,966	240,237	170,071
Noncurrent liabilities		201,047	193,657	201,047	193,657
Total		**441,246**	**363,623**	**441,284**	**363,728**

(a) On 20 December 2013, Samarco adhered to a Federal Tax Amnesty and Installment Program named Programa de Parcelamento REFIS IV, under Law nº 12.865/13. The first installment was paid at the time it opted to join. At December 31, 2018 the amount was R$ 201,047 (R$ 193,657 at December 31, 2017) refers to the long-term installments updated by the SELIC rate. The short term installments amount to 16,544 (R$ 14,783 at December 31, 2017). The amounts administered by the Brazilian Internal Revenue Service were consolidated in September 2017 and those administered by the Attorney General´s Office of the National Treasury in February 2018. The Company is currently awaiting a review of the request for revision submitted to these two entities due to inconsistencies found in their consolidation framework.

b) Refers to the IRRF levied on services provided by the subsidiary Samarco Europe related to the intermediation of sales of iron ore, pursuant to note 21.

c) Payment in installments, pursuant to the terms of the Municipal Law of Anchieta No. nº 1,234/2017, of the debts represented in the Assessment Notices Nos. 048/2007, 049/2007, 050/2007 – registered as Delinquent Debt to the government – and Assessment Notices Nos. 026/2008 e 001/2009 – not registered as Delinquent Debt, in 13 monthly installments with a down payment of 30% with final maturity in November 2018, with restatement according to the IPCA-E of installments due after December 31, 2017, plus interest of 1% per month.

With respect to the debts registered as Delinquent Debt to the government, allowance was made for a reduction of 50% of the delinquent interest due following the registration as Delinquent Debt and late charges of 30% imposed by the municipality, and a reduction of the infraction penalty involved (AI nº 050/2007).

With respect to the debts not registered as Delinquent Debt, allowance was made for a reduction of 50% of delinquent interest applicable after the taxable event.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

19. PROVISIONS FOR CONTINGENCIES

The Company is a party in judicial and administrative proceedings in various courts and government agencies, arising from the normal course of operations, basically involving tax, civil, labor and environmental issues. Based on the information and positions of its internal and external legal advisors, management has recorded a provision for contingencies in an amount considered sufficient to cover cases assessed as involving probable losses. Provisions and deposits were made for the failure of the Fundão dam (Note 3 (h) and 3(c) respectively).

In 2018, the provisions for probable-loss contingencies are shown net of the corresponding judicial deposits of R$ 83,913 (R$ 81,473 in 2017). The balance of judicial deposits for which no corresponding provisions were made is recorded in assets totaling R$ 1,849,787 (R$ 1,772,305 in 2017) and is broken down as below:

		Parent Company and Consolidated	
		2018	2017
Judicial tax deposits	(a.1)	1,503,828	1,439,342
Civil judicial deposits	(a.1)	334,022	325,760
Judicial Deposits - Labor Claims		8,276	7,052
Judicial environmental deposits		3,661	151
		1,849,787	**1,772,305**

(a.1) On December 11, 2015 Samarco made a compulsory deposit related to the CFEM tax proceeding, the amount of which was converted to a security for tax collections related to IRPJ (2000 to 2003 and 2007 to 2008) by court order in 2017 (Note 3).

The changes in the provision for probable-loss contingencies (Notes 26 and 27).

	Parent Company and Consolidated				
	2017	Additions	Reversals	Charges	2018
Tax proceedings	82,442	3,933	-	237	86,612
(-) Judicial tax deposits	(70,693)	-	-	(1,738)	(72,431)
Civil claims	58,725	376	(6)	(4,890)	54,205
(-) Judicial deposits - civil claims	(114)	-	-	-	(114)
Labor claims	61,748	12,453	(15,687)	(4,124)	54,390
(-) Judicial deposits - labor claims	(10,666)	(2,270)	4,036	(2,468)	(11,368)
Environmental proceedings	2,013	42	(64)	241	2,232
	123,455	**14,534**	**(11,721)**	**(12,742)**	**113,526**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The provisions are detailed as follows:

		Parent Company and Consolidated					
		2018			2017		
		Provision	Court deposits	Net	Provision	Court deposits	Net
ECE - ES	(a.1)	39,481	(39,481)	-	38,532	(38,532)	-
ECE - MG	(a.1)	32,951	(32,951)	-	32,161	(32,161)	-
Attorney fees	(a.2)	8,287	-	8,287	9,449	-	9,449
Other		5,893	1	5,894	2,300	-	2,300
Tax Proceedings		**86,612**	**(72,431)**	**14,181**	**82,442**	**(70,693)**	**11,749**
Civil claims	(a.3)	**54,205**	**(114)**	**54,091**	**58,725**	**(114)**	**58,611**
Labor claims		**54,390**	**(11,368)**	**43,022**	**61,748**	**(10,666)**	**51,082**
Environmental proceedings		**2,232**	**-**	**2,232**	**2,013**	**-**	**2,013**
		197,439	**(83,913)**	**113,526**	**204,928**	**(81,473)**	**123,455**

(a) Provisions recognized by the Company for litigation proceedings:

			Parent Company and Consolidated	
Note	Description	Status	2018	2017
(a.1)	Court proceeding filed to declare the unconstitutionality and illegality of the requirement to pay charges and acquisition of emergency energy, due to technical defects when these requirements were introduced.	Both proceedings (ES and MG) are awaiting judgment at another appeals court (3rd judicial instance).	72,432	70,693
(a.2)	Provision is made for lawyers' fees referring to proceedings classified as having a remote chance of defeat.	-	8,287	9,449
Others	Proceedings related to the former Guilman-Amorim hydroelectric power plant, closed down as a result of a spin-off and subsequent merger, relative to the inclusion in the calculation base for COFINS of the income from leasing.	Proceedings awaiting review of the preliminary injunction at the second judicial instance.	5,893	2,300
(a.3)	Provision made to cover potential losses on civil proceedings.	Proceedings at the judicial courts at several stages.	54,205	58,725
Labor	Labor claims primarily related to the application of fines by the authorities, in addition to labor claims filed by employees and service providers.	Proceedings at the judicial and administrative courts at several stages.	54,390	61,748
Environmental	Provision constituted to cover potential losses with environmental lawsuits.	Proceedings at the judicial and administrative courts at several stages.	2,232	2,013
			197,439	**204,928**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(b) Possible contingencies:
The Company is a party in other actions for which management, based on the information and position of its internal and external legal advisors, has not set up a provision for contingencies, since the chance of loss has been rated as possible. The main such cases are described below:

		Parent Company and Consolidated	
Description	**Status**	**2018**	**2017**
Assessment Notices for the alleged nonpayment of CSLL in 2007 to 2014 and injunction filed involving 2013 forward.	The collection of CSLL for 2007-2008 and for 2011-2014 awaiting analysis of administrative appeal. The CSLL 2011 and 2012 are with the enforceability suspended awaiting analysis of leading cases at the Supreme Court. The proceeding related to the period 2009 and 2010 was judged in June 2017 at the administrative level, with partial success (deductibility of the royalties). The remaining discussion is awaiting analysis by the courts with enforceability suspended by a preliminary order. For the period 2013 forward Samarco has favorable court rule at the first and second instances considering legal the non-payment of CSLL.	5,491,463	5,348,384
Assessment notices for 2000 to 2003 and 2007 to 2014, for allegedly incorrectly calculating the IRPJ as a result of using the rate of 18% over profit deriving from mineral exports instead of the general rate of 15% plus the 10% surcharge.	Proceedings related to the period 2000 to 2003 and 2007 to 2008 are the object of collection at the court level. Samarco obtained a favorable first instance rule for the period 2009-2010 and the enforceability of the debt is suspended. Awaiting analysis of PGFN appeal. Regarding the period 2011-2014, the company is awaiting appreciation of the appeal at the administrative level.	4,231,469	4,415,534
Assessment Notice issued by the National Mining Production Department (DNPM) for alleged underpayment of the Financial Compensation for Exploration of Mineral Resources (CFEM).	Three judicial proceedings awaiting decision from lower court for the period 1991 to 2007. Collection relative to the period 2008 and 2009 is awaiting judgment of administrative appeal.	874,453	1,168,714
Tax collections regarding the calculation base of PIS payments relative to the periods September 1989 to August 1993.	One proceeding awaiting judgment at lower court and one proceeding awaiting decision at upper court.	22,574	22,279
Assessment Notice demanding social security contributions on payments made to insured employees as profit shares and "Field of Ideas" award, amongst other matters such as (i) social contributions allegedly due to the National Development Fund (FND) on said payments; (ii) fine for failure to pay social contributions; and (iii) fine for submitting incomplete information in declaration forms known as GFIPs.	Pending decision of the administrative appeal.	25,973	25,084
Disallowance of the offset of IRPJ and CSLL losses of the former Guilman-Amorim hydroelectric power plant (subject to the legally established 30% limit).	Pending analysis of administrative appeals filed by the Company.	9,017	8,733

>> TO BE CONTINUED

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

>> CONTINUATION

		Parent Company and Consolidated	
Description	**Status**	**2018**	**2017**
Disallowance of offset PIS and COFINS credits in the period April 2006 to December 2007 and 2008 to 2010 against monthly estimated IRPJ debits calculated in the same period, submitting the individual PER/DCOMPs by quarter and origin of credits (PIS and COFINS credits).	Proceedings pending decision of the administrative appeal.	303,378	227,465
Assessments for ICMS due on the transfer of electricity from the Muniz Freire power plant, which Samarco owns, for consumption at its industrial establishment in Ponta Ubu, Anchieta, ES.	Proceeding pending analysis at lower court.	33,296	31,247
Tax collection enforcement and assessment notice issued by the municipal government of Anchieta in respect of the area where Samarco's industrial plant is located in Ubu, which is subject to the tax, also demanding tax for the area for which the ITR is paid.	Three proceedings (1999 to 2004, 2007 to 2011 and 2012 to 2015) awaiting judgment in court and 3 at the administrative level (2016 to 2018).	161,162	138,718
Civil proceedings primarily related to third-party compensation. According to the opinion of the Company's legal advisers, the probability of losing these cases is possible.	Proceedings taken to court are in various procedural phases.	1,114,457	936,994
Labor claims primarily related to the application of fines by the regulatory authorities, in addition to labor claims filed by employees and service providers.	Proceedings taken to court are in various procedural phases.	415,132	199,529
Proceedings involving environmental risks in the states of Minas Gerais and Espírito Santo, consisting of assessments from the inspection authorities.	Proceedings taken to court are in various procedural phases.	1,132,733	1,001,884
Assessment related to regulatory fine for the transmission of EFD – contributions with errors, relative to the period of 2013.	Proceeding awaiting review of Administrative Appeal.	138,638	130,627
Other	-	126,255	125,649
		14,080,000	**13,780,841**

The contingencies relating to the failure of Fundão dam are described in Note 3(h).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

20. OTHER PROVISIONS

		Parent Company and Consolidated	
		2018	2017
Provision for electricity	(a)	695	1,130
Provision for social, environmental and socio-economic remediation	(b)	2,752,791	1,737,222
Total current		**2,753,486**	**1,738,352**

		Parent Company and Consolidated	
		2018	2017
Provision for asset retirement obligation	(d)	381,297	350,580
Provision for mining rights	(c)	112,222	112,222
Provision for social, environmental and socio-economic recuperation	(b)	6,787,344	9,516,701
Total noncurrent		**7,280,863**	**9,979,503**

(a) Acquisition of energy for use in production, not invoiced by the concession operators in the period.
(b) Provision for the failure of the Fundão dam (Note 3(f)).
(c) The Company pays its stockholder Vale for the assignment of mining rights to geological iron ore resources. These amounts are calculated at the rate of 4% of dividends paid (Note 11).
(d) The changes in the provision for asset retirement obligations were as follows:

	Parent Company and Consolidated	
	2018	2017
Provision at beginning of year	350,580	319,863
Provision increase (financial update)	30,717	30,717
Provision at end of year	**381,297**	**350,580**

In 2014, the Company revised its conceptual plan to close down operating units in order to diagnose the environmental situation of the mining exploration areas, acquire data to support the assessment of the environmental impact and risks of closure, establish measures to mitigate risks posed by potential sources of contamination in order to stabilize environmental liabilities and estimate the closing costs according the plan. The Company's policy is to revise this plan every three years; however, due to the Fundão dam failure, management, with the support of external consultants, revised its plan for closure of the operating units in 2015 and 2016.

The provision for asset retirement was based on current information, including the technology available and current prices. The provision made was discounted to present value at the discount rate of 10.62% per annum, based on the parameters adopted by the Company for economic and financial valuations.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

21. OTHER LIABILITIES

Other liabilities are shown below:

		Parent Company		Consolidated	
Current		**2018**	**2017**	**2018**	**2017**
Commission payable overseas to related parties (Note 11)	(a)	17,196	13,351	-	-
Demurrage payable	(b)	1,011	903	1,011	903
Amounts payable (material/services)	(c)	722	719	722	719
Consórcio UHE Guilman Amorim (Note 2)		3,680	3,188	3,680	3,188
Installment payments on environmental fines - SEMAD (Note 3)	(d)	28,777	27,069	28,777	27,069
Other		2,047	2,221	2,140	1,481
Total current			**47,451**	**210**	**33,360**
Noncurrent					
Payments on environmental fines - SEMAD (Note 3)	(d)	71,794	94,738	71,794	94,738
Other		4,810	495	4,810	495
Total noncurrent		**76,604**	**95,233**	**76,604**	**95,233**

(a) Agency commission paid to the subsidiary Samarco Europe for intermediating iron ore sales.
(b) Amount owed by Samarco for the demurrage port fees (excess time unloading or loading the product).
(c) Amounts referring to materials and goods acquired which were not recorded, as the respective invoice had not been issued by the supplier. The goods and services have been recorded under inventory and cost.
(d) Environmental fines related to the damage caused by the dam failure (Note 3(g)).

22. STOCKHOLDERS' EQUITY

22.1 Capital

The fully subscribed and paid-up share capital at 31 December 2018 and 2017 amounts to R$ 297,025, consisting of ordinary nominative shares divided as follows:

	Number of shares	% of total capital
BHP Billiton Brasil Ltda.	2,621,649	50
Vale S.A.	2,621,649	50
	5,243,298	**100**

22.2 Dividends

In a General Shareholders Meeting held on April 28, 2015, the motion was approved to distribute dividends related to the fiscal year of 2014 in the amount of R$ 2,805,548, of which (i) R$ 2,104,161 refers to supplemental dividends and (ii) R$ 701,387 refers to mandatory dividends. On December 18, 2015, because of the failure of the Fundão dam (Note 3), a court decision was issued which, among other determinations, prevented Samarco from making a distribution of approved dividends as of November 5, 2015. Consequently, as decided in the Extraordinary Stockholders' Meeting held on December 31, 2015, the dividends declared in the Annual Stockholders' Meeting (AGO) and not yet paid out were reclassified to non-current.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

According to the Company's By-Laws, the mandatory dividends are 25% of the net profit according to Law 6.404/76.

At December 31, 2018, the Company retains an accumulated loss of R$ 19,038,849 (R$ 16,561,741 at December 31, 2017).

22.3 Carrying value adjustments

		Parent Company and Consolidated	
		2018	2017
Inventory		119,792	61,978
Property, plant and equipment		9,627,725	6,892,025
Intangible assets		104,690	27,395
Cost		974,089	859,547
Exchange variance		(9,340,802)	(6,312,323)
Others		141,381	134,754
Accumulated translation adjustments	(a)	**1,626,875**	**1,663,376**
Remeasurement of retirement benefit		(4,141)	(4,131)
Remeasurement of retirement benefit	(b)	**(4,141)**	**(4,131)**
		1,622,734	**1,659,245**

(a) These adjustments are made for exchange variance resulting from translating the balance sheet and statement of operations for the year from the functional currency (USD) to the reporting currency, the Real.
(b) Refers to the actuarial gains and losses, increase in liabilities, change in assumptions, earnings on the plan's asset and change in the irrecoverable surplus (Note 16).

23. REVENUE

The Company operates in the mining sector, deriving its revenue from the sale of two types of iron ore pellets: PDR - Pellets for direct reduction and PBF - Pellets for the blast furnace. The surplus production of iron ore concentrate is sold as fines (pellet feed).

Due to the failure of the Fundão dam and subsequent suspension of the exploration licenses, operations have been temporarily suspended, with no production having been generated since then.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

In 2018 and 2017, the Company sold products to the domestic and foreign markets, such as pellet feed to the Americas and Asia.
In addition to the revenue from products and sub products, the Company also obtained revenue from the sale of surplus electric energy and logistic services at its port, such as lease of tugs and real property.

	Parent Company - Consolidated	
	2018	2017
Fines – Domestic	-	29
Fines – Overseas	18,781	26,908
Electricity	59,981	41,404
Port Berth availability	26,536	12,556
Other products and services	11,116	4,280
Total gross revenue	**116,414**	**85,177**
Sales taxes	(11,141)	(6,272)
Freight on sales	(386)	-
Net revenue	**104,887**	**78,905**

24. COST OF GOODS SOLD

The cost of goods sold is broken down below:

		Parent Company		Consolidated	
		2018	2017	2018	2017
Currency translation		(114,542)	(90,591)	(114,542)	(90,591)
Electricity sales		(17,215)	(7,296)	(17,215)	(7,296)
Port berth availability		(4,196)	(3,394)	(4,196)	(3,394)
CFEM		(898)	(383)	(898)	(383)
Idle capacity	(a)	(566,032)	(682,740)	(566,032)	(682,740)
Provision (reversal) for reinforcing dam facilities	(b)	46,171	(24,655)	46,171	(24,655)
Other		(24,081)	(6,232)	(24,042)	(6,201)
Cost of goods sold		**(680,793)**	**(815,291)**	**(680,754)**	**(815,260)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(a) Operations in Mariana were suspended following the Fundão dam failure (Note 1). Operations of the Ubu plant in ES were also affected as a result. The fixed costs of both Samarco sites incurred up to December 31, 2018 were therefore allocated directly to costs of Idle capacity:

	2018	2017
Consumables	(1,478)	(994)
Materials	(29,053)	(40,096)
Services	(131,787)	(165,461)
Labor	(137,989)	(186,661)
Electricity	(27,612)	(34,120)
Depreciation	(183,510)	(181,341)
Structural reinforcement of dams	(48,993)	(66,755)
Other	(5,610)	(7,312)
Total current	**(566,032)**	**(682,740)**

Part of the balance recorded under "idle capacity", totaling R$ 48,993 (R$ 66,755 in 2017), refers to outsourced services to maintain and repair Samarco facilities affected by the failure of the dam (Note 3 (i)).

(b) Provisions for the Fundão tailings dam failure (Note 3 (i)).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

25. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

	Parent Company		Consolidated	
	2018	2017	2018	2017
Selling expenses				
Outsourced services	(13,403)	(32,737)	(13,603)	(32,737)
Personnel expenses	(12,078)	(17,056)	(14,144)	(17,056)
Depreciation and amortization	(9,151)	(7,896)	(9,272)	(8,053)
Auxiliary supplies	(3,509)	(2,834)	(3,509)	(2,834)
Shipment expenses, net	(101)	(55)	(101)	(55)
Provision (reversal) for doubtful debts	10,948	5,378	10,948	5,378
Provision taxes on remittances abroad	(2,746)	(705)	(2,746)	(705)
Sales expenses of subsidiaries	(5,136)	(4,606)	-	(3,927)
Expenses maintenance activities	(3,636)	(4,924)	(3,636)	(4,924)
General expenses	(1,645)	(5,484)	(2,814)	(5,390)
Total	**(40,457)**	**(70,919)**	**(38,877)**	**(70,303)**
General and administrative expenses				
Outsourced services	(8,561)	(11,488)	(8,561)	(11,488)
Personnel expenses	(41,577)	(38,652)	(41,577)	(38,652)
Depreciation and amortization	(672)	(731)	(672)	(731)
Auxiliary supplies	(57)	(96)	(57)	(96)
General expenses	(4,568)	(5,058)	(4,568)	(5,058)
Total	**(55,435)**	**(56,025)**	**(55,435)**	**(56,025)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

26. OTHER NET OPERATING EXPENSES (INCOME)

Details of other net operating expenses are shown below:

		Parent Company		Consolidated	
		2018	2017	2018	2017
Provision for restructuring of PDV plan		(629)	(8,409)	(629)	(8,409)
Provisions (reversal) for losses to ICMS ES		1,685	7,046	1,685	7,046
Provisions (reversals) for contingencies (note 19)		5,862	131,138	5,862	131,138
Provision for socio-environmental and socio-economic remediation	(a)	2,894,783	(4,500,728)	2,894,783	(4,500,728)
Expenses with socio-environmental and socio-economic recovery	(a)	(146,602)	(566,529)	(146,602)	(566,529)
Provision resource input shareholders Fundação Renova	(a)	(2,091,011)	-	(2,091,011)	-
Participation of employees		-	(93)	-	(93)
Tax expenses		(33,748)	(41,269)	(33,736)	(41,269)
Expenses with investments and social projects		(6,811)	(6,966)	(6,811)	(6,966)
Expenses Fundação Renova	(a)	(323)	(52,106)	(323)	(52,106)
Fines related to environmental and socioenvironmental remediation	(a)	-	(5,950)	-	(5,950)
Expenses with research (note 13)		(27,471)	(36,049)	(27,471)	(36,049)
Legal and expert fees		(3,436)	1,031	(3,436)	1,031
Inventory adjustment (stockroom)		(108)	(4,747)	(108)	(4,747)
Reversal impairment provision		(3,342)	134,129	(3,342)	134,129
Sale of property, plant and equipment		2	(142,053)	2	(142,084)
Other provisions (reversals)		(944)	10,633	(944)	10,633
Other, net		111,541	89,488	110,566	89,414
Total		**699,448**	**(4,991,434)**	**698,485**	**(4,991,539)**

(a) Provisions and expenses related to the failure of Fundão dam (Note 3).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

27. FINANCIAL RESULT

The Company's detailed finance result (consolidated and parent company) is shown as follows:

Finance income		**2018**	**2017**
Yields on judicial deposits	(a)	87,302	131,147
Earnings on investments		272	265
Discounts obtained		98	137
Other financial revenue		3,588	7,850
Finance income - consolidated		**91,260**	**139,399**
Income of subsidiaries		(3)	(4)
Finance income - parent company		**91,257**	**139,395**

Financial expenses		**2018**	**2017**
Default interest and tax charges	(b)	(30,055)	(49,812)
Charges on loans and financing		(900,807)	(665,860)
Interest on contingencies	(a)	(564)	(15,507)
Commission and bank interest		(35,932)	(22,975)
IRRF on interest - remittance abroad		(85,749)	(70,451)
PIS and COFINS on financial revenue	(c)	(23,216)	(4,305)
Financial expenses from environmental and socio-economic recovery	(d)	(1,227,167)	(797,428)
Other financial expenses		(38,743)	(39,441)
Finance expenses – consolidated		**(2,342,233)**	**(1,665,779)**
Expenses of subsidiaries		5	(67)
Finance expenses - parent company		**(2,342,228)**	**(1,665,846)**

(a) Refers to the interest accruals of court deposits and provisions for contingencies in respect of tax, civil, labor and environmental proceedings. (Note 19)
(b) Refers to arrears and tax interest on ICMS - Minas Gerais, REFIS, TFRM and other.
(c) Refers to PIS and COFINS taxes on financial revenue as per normative amendments introduced by Decree 8.451.
(d) Financial up-dating of the provisions referring to the failure of the Fundão tailings dam (Note 3).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The balance of exchange variance is represented as follows:

Exchange variance	**2018**	**2017**
Cash	(6,826)	11,710
Trade receivables	(46,879)	(160)
Recoverable taxes	(268,501)	(30,225)
Court deposits	(301,140)	(36,777)
Trade payables	2,257	(6,765)
Payroll, provisions and social contributions	2,940	484
Taxes payable	36,313	8,617
Dividends	452,334	52,133
Contingency	4,287	712
Deferred income tax	63,990	7,794
Other accounts payable domestic – related parties	406,043	8,872
Others	67,745	(2,764)
Net exchange variance – consolidated	**412,563**	**13,631**
Net exchange variance of subsidiaries	5	(4)
Net exchange variance - parent company	**412,568**	**13,627**

28. INCOME TAX

The Company is subject to income tax at the rate of 18% on income derived from subsidized (tax incentive) exportations and 25% on the unsubsidized portion.

28.1 Income tax payable

The changes in income tax payable are as follows:

	Parent Company		**Consolidated**	
	2018	**2017**	**2018**	**2017**
Balance at beginning of year	**-**	**-**	**104**	**84**
Provisions in the period	7,093	50,865	7,132	50,838
Payments	(7,093)	-	(7,093)	47
Offsetting of the negative balance from prior years	-	(50,865)	-	(50,865)
Balance at end of year	**-**	**-**	**143**	**104**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

28.2 Deferred income tax
The Company has deferred income tax recorded under noncurrent assets constituted on temporarily nondeductible provisions, at the rates of 18% and 25%, according to the nature of each provision as an adjustment of the net income from subsidized exports or adjustment of taxable income, respectively. The realization of these assets shall take place according to the expectation of resumption of the Company's operations and the consequent generation of taxable profit foreseen for future years.

In line with the expectation of resumption of the Company's operations (Note 1b), an analysis was carried out relative to the realization of the deferred income tax constituted up to 2018. And, with the understanding that future tax profits subject to taxation at the rate of 25% will not be sufficient to support the use of the deferred income tax arising from the Provision for socio-environmental and socio-economic recovery and tax losses, the Company has chosen to not recognize the deferred income tax under these accounts in its bookkeeping.

28.3 Deferred income tax on nonmonetary items
The financial statements have been translated from the functional currency (USD) to the presentation reporting currency (R$). The basis for calculating income tax and assets and liabilities is denominated in Brazilian Reais (R$). A change in the exchange rate could therefore have a significant effect on the income tax expenses, especially on nonmonetary assets:

Composition of deferred income tax related to net monetary and non-monetary items:

	Note	2018			2017		
Amounts recorded at the tax rate of:		**25%**	**18%**	**Total**	**25%**	**18%**	**Total**
Provision for ICMS losses - ES	8	372,667	-	372,667	373,088	-	373,088
Provision for depreciation, write-off and other - Property, plant and equipment	12	1,365	-	1,365	-	-	-
Provision for civil claims	19	13,481	-	13,481	14,469	-	14,469
Provision for tax proceedings	19	13,271	1,129	14,400	13,384	414	13,798
Provision for labor claims	19	13,573	-	13,573	15,392	-	15,392
Provision for environmental proceedings	19	558	-	558	504	-	504
Provision for mining rights	20	28,055	-	28,055	28,055	-	28,055
Provision for social, environmental and socio-economic recuperation	20	3,347,159	-	3,347,159	1,353,212	-	1,353,212
Reduction to recoverable value of deferred income tax asset of Provision for socio-environmental and socio-economic recovery		(3,347,159)	-	(3,347,159)	(1,353,212)	-	(1,353,212)
Provision for asset retirement obligation	20	53,396	-	53,396	45,717	-	45,717
Unrealized exchange rate variation		574,423	-	574,423	-	-	-
Reduction to recoverable value of deferred income tax asset on unrealized exchange rate variation		(574,423)	-	(574,423)	-	-	-
Tax losses		2,592,281	-	2,592,281	1,928,707	-	1,928,707
Reduction to recoverable value of deferred income tax asset of tax losses		(2,592,281)	-	(2,592,281)	(1,928,707)	-	(1,928,707)

>> TO BE CONTINUED

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

>> CONTINUATION

	Note	2018			2017		
Others		67,125	-	67,125	46,428	-	46,428
Total consolidated assets		**563,491**	**1,129**	**564,620**	**537,037**	**414**	**537,451**
Conversion from the functional currency		-	(1,775,950)	(1,775,950)	-	(1,258,782)	(1,258,782)
Depreciation for tax purposes		-	(926,851)	(926,851)	-	(763,158)	(763,158)
Financial revenue on court deposits		(129,843)	-	(129,843)	(112,716)	-	(112,716)
Total consolidated liabilities		**(129,843)**	**(2,702,801)**	**(2,832,644)**	**(112,716)**	**(2,021,940)**	**(2,134,656)**
Consolidated net total		**433,648**	**(2,701,672)**	**(2,268,024)**	**424,321**	**(2,021,526)**	**(1,597,205)**
Provisions of subsidiaries		(206)	-	(206)	(105)	-	(105)
Parent company net total		**433,442**	**(2,701,672)**	**(2,268,230)**	**424,216**	**(2,021,526)**	**(1,597,310)**

The expected realization of deferred income tax is shown below:

	Up to 1 year	1 to 3 years	3 to 5 years	5 to 8 years	8 to 10 years	Over 10 years	Total 2018
Provision for ICMS losses ES and MG	-	-	-	-	-	372,667	372,667
Civil proceedings	-	-	-	-	13,481	-	13,481
Tax proceedings	-	-	-	1,095	-	13,305	14,400
Labor claims	2,557	7,288	3,722	6	-	-	13,573
Environmental proceedings	-	-	-	-	558	-	558
Mining rights - Vale	28,055	-	-	-	-	-	28,055
Provision for asset retirement obligation	1,365	-	-	-	-	53,396	54,761
Conversion from the functional currency	-	-	-	-	-	(1,775,950)	(1,775,950)
Depreciation for tax purposes	-	-	-	-	-	(926,851)	(926,851)
Others	4,139	1,542	51,530	-	-	(119,929)	(62,718)
Total consolidated	**36,116**	**8,830**	**55,252**	**1,101**	**14,039**	**(2,383,362)**	**(2,268,024)**
Provisions of subsidiaries	(206)	-	-	-	-	-	(206)
Total parent company	**35,910**	**8,830**	**55,252**	**1,101**	**14,039**	**(2,383,362)**	**(2,268,230)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

28.4 Income tax in the statement of operations

	Parent Company		Consolidated	
	2018	2017	2018	2017
Net income (loss) before taxation	**(1,810,158)**	**(7,367,049)**	**(1,810,104)**	**(7,366,971)**
Functional currency effects - art. 62 of Law 12973/2014	(2,909,139)	(180,035)	(2,909,139)	(180,035)
Profit (Loss) taxable	**(4,719,297)**	**(7,547,084)**	**(4,719,243)**	**(7,547,006)**
Permanent differences:				
Equity in the results of investees	(3,176)	(610)	-	-
Overseas profits	673	373	673	373
Non-deductible tax fines	1	13,940	1	13,940
Non-deductible donations	4,122	1,768	4,122	1,768
Other permanent additions (exclusions)	250	(584)	(2,980)	(1,269)
Temporary differences:				
Inclusion of provision for socioenvironmental and socioeconomic recovery related to dam failure	377,224	5,322,811	377,224	5,322,811
Impairment provision	5,459	(215,672)	5,459	(215,672)
Tax depreciation	(654,320)	(675,319)	(654,320)	(675,319)
Yield from court escrow deposits	(87,037)	(129,834)	(87,037)	(129,834)
Other temporary additions (exclusions)	104,043	(28,638)	104,043	(28,638)
Unrealized exchange rate variation	2,297,692	-	2,297,692	-
Calculation basis	**(2,674,366)**	**(3,258,849)**	**(2,674,366)**	**(3,258,846)**
Statutory rate	25%	25%	25%	25%
Income tax calculated	**668,592**	**814,711**	**668,592**	**814,711**
Deferred income tax on tax depreciation	(163,693)	(168,830)	(163,693)	(168,830)
Deferred income tax yield on judicial deposits	(21,759)	(32,459)	(21,759)	(32,459)
Deferred income tax depreciation temporary additions (exclusions)	126,086	(61,152)	126,086	(61,153)
Unrealized exchange rate variation	574,423	-	574,423	-
Tax paid by companies overseas	-	-	(54)	(77)
Adjustment deferred income tax of temporary additions	(668,729)	-	(668,729)	-
Provision for loss of tax losses	(664,699)	(814,711)	(664,699)	(814,711)
Deferred income tax on translation	(517,171)	(28,340)	(517,171)	(28,340)
Income tax in the statement of operations	**(666,950)**	**(290,781)**	**(667,004)**	**(290,859)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

Income tax revenue (expense) segregated between current and deferred:

	Parent Company		Consolidated	
	2018	2017	2018	2017
Current income tax	668,592	814,711	668,538	814,633
Unrealized exchange variances	574,423	-	574,423	-
Provision for deferred income tax	(664,675)	(814,711)	(664,675)	(814,711)
Provision for loss deferred income tax adj. temp.	(728,120)	(262,441)	(728,120)	(262,441)
Deferred income tax on non monetary items	(517,170)	(28,340)	(517,170)	(28,340)
Current and deferred income tax	**(666,950)**	**(290,781)**	**(667,004)**	**(290,859)**

29. COMMITMENTS

The Company is party to long-term contracts for the supply of raw materials and services and the acquisition of fixed assets, as shown below:

	Up to 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total 2018
Capital expenditure for expansion and overhaul of property, plant and equipment	110,917	-	-	-	-	110,917
Services and other	633,016	175,892	47,622	7,035	33	863,598
Iron ore acquisition	-	240,305	323,547	681,593	1,048,755	2,294,200
Supply of energy and raw materials	535,678	538,476	538,476	569,113	-	2,181,743
Freight and logistics costs	2,588	-	-	-	-	2,588
	1,282,199	**954,673**	**909,645**	**1,257,741**	**1,048,788**	**5,453,046**

These commitments consists of long-term contractual obligations to suppliers to renew and expand fixed assets, in addition to the provision of various services to maintain the manufacturing and administrative facilities, to acquire iron ore from third parties, to supply energy, consumables and costs on cargo chartering.

Due to the failure of the Fundão dam, the Company implemented a number of initiatives in relation to its commitments (Note 3).

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

30. FINANCIAL INSTRUMENTS

30.1 Financial risk management

The effect of the initial application of CPC 48 (IFRS 9) to the Company's financial instruments is outlined in Note 2.6 The Company has financial instruments inherent to its operations, represented by cash and cash equivalents, restricted marketable securities, trade accounts receivable, other assets, trade payables, loans and financing, financial charges payable and other liabilities.

The management of these instruments assures maximum possible liquidity, profitability and security. Financial oversight takes into account the analysis of the risk exposure that management intends to mitigate (exchange, interest rate, etc.) and the policies and strategies determined by Company management, always duly approved by the finance committee.

The Company and its subsidiaries do not invest in derivatives or any other high-risk assets on a speculative basis.

30.2 Financial instruments by category

The financial instruments have been classified as follows:

	Parent Company			Consolidated		
	2018	2017		2018	2017	
Current assets	Amortized Cost	Loans and receivables	Amortized Cost	Amortized Cost	Loans and receivables	Amortized Cost
Cash and cash equivalents	79,981	55,568	-	82,322	57,473	-
Restricted short-term investments	1,919	1,130	-	1,919	1,130	-
Accounts receivable	7,654	17,143	-	6,093	15,813	-
Other assets (note 9)	17,709	37,186	-	17,777	37,187	-
Total current assets	**107,263**	**111,027**	**-**	**108,111**	**111,603**	**-**
Noncurrent assets						
Other assets (note 9)	16,747	18,356	-	16,942	18,538	-
Total assets	**124,010**	**129,383**	**-**	**125,053**	**130,141**	**-**
Current liabilities						
Trade payables	76,439	-	42,805	76,455	-	42,825
Loans and financing	18,530,227	-	15,176,001	18,530,227	-	15,176,001
Financial charges payable	1,844,328	-	1,005,279	1,844,328	-	1,005,279
Other liabilities (note 21)	53,433	-	47,451	36,330	-	33,360
Total current liabilities	**20,504,427**	**-**	**16,271,536**	**20,487,340**	**-**	**16,257,465**
Noncurrent liabilities						
Other liabilities (note 21)	76,604	-	95,233	76,604	-	95,233
Total liabilities	**20,581,031**	**-**	**16,366,769**	**20,563,944**	**-**	**16,352,698**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

Financial assets consist of:

(a) Cash, cash equivalents and restricted short-term investments:

	Parent Company		Consolidated	
	2018	2017	2018	2017
Cash and cash equivalents	79,981	55,568	82,322	54,473
Restricted short-term investments	1,919	1,130	1,919	1,130
	81,900	**56,698**	**84,241**	**58,603**

- Cash and cash equivalents
- Banks - Funds available in accounts maintained in Brazil and abroad.
- Marketable securities - Funds invested in conservative, highly liquid bank products.
- Restricted cash investments – frozen resources due to the judicial proceeding related to the failure of the Fundão dam (Note 3(a)), funds maintained and invested in specific bank accounts (collection accounts) associated with certain bank loans and financing, as well as resources maintained to secure the contractual obligations related to the transmission of energy.

(b) Accounts receivable

Resources to be received by the Company, with its accounting balance representing market value.

	Parent Company		Consolidated	
	2018	2017	2018	2017
Accounts receivable	7,654	17,143	6,093	15,813

(c) Financial Liabilities

Financial liabilities consist of loans and financing. These funding operations are usually designed to support the Company's routine activities and investments.

The geographical distribution by region of the Company's loans and financings is shown in the table below:

	Parent Company and Consolidated	
	2018	2017
Brazil	20.82%	17.52%
USA	69.02%	71.89%
Japan	10.16%	10.59%

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

30.3 Financial risk factors

The Company's normal activities expose it to a variety of financial risks: credit risk, market risk (including price risk, interest rate risk, exchange rate risk) and liquidity risk, as follows:

(a) Credit risk

The Company's sales policy is governed by the credit policies determined by management with the objective of mitigating the risks of failing to receive payment on pending sales and those yet to be made. The Company uses an internal methodology for credit risk classification for each counterparty, based in quantitative information (such as market prices, external credit ratings and financial information on the counterparty), as well as qualitative information (strategic position of the counterparty and the history of commercial relationship). Based on the credit risk attributed to the counterparty, the Company uses the following strategies to mitigate the risk: prepayment, discounts of receivables, insurance, letters of credit, corporate and bank guaranties, among others.

Gross sales revenue amounted to R$ 116,414 in 2018 (R$ 85,177 in 2017), while the consolidated allowance for doubtful accounts made in 2018 was R$ 13,423 (R$ 24,140 in 2017).

The exposure of the receivables to credit risk is distributed as shown below:

	Parent Company and Consolidated	
	2018	2017
Middle East / Africa	20.4%	9.0%
Asia (except China)	79.6%	35.4%
Americas	-	55.6%

(b) Market risk

(i) Price risk

The price of the Company's principal product, iron ore pellets, is set through periodic negotiations (primarily quarterly and monthly) with customers. The level of prices negotiated is directly impacted by global supply and demand for iron ore.

(ii) Interest rate risk

This risk arises from the possibility the Company or its subsidiaries sustain unforeseen impacts arising from fluctuations in interest rates on their financial assets and liabilities and from inflation. Most of the Company's loans and financings as of December 31, 2018 are denominated in United States Dollars. An amount of loans and financings of R$ 8,628 million bears interest at fixed rates and R$ 9,902 million at floating rates corresponding mostly to the variance in the LIBOR plus a contractual spread. The Company has no hedge against LIBOR variance, in accordance with its internal and its stockholders' guidelines. Interest-rate risk also derives from the small amount of debt referenced to the IGP-DI price index and short-term investments referenced to the Selic base interest rate.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(iii) Exchange rate risk

Arising from the possibility of fluctuations in exchange rates for the foreign currencies (other than the functional currency) used by the Company to acquire domestic consumables and/or services, pay taxes, dividends, etc. The Company has the following assets and liabilities, in Reais, which can affect its results due to exchange rate variations:

(a) Asset exposure	Consolidated	
Current assets	**2018**	**2017**
Cash and cash equivalents	34	1,439
Restricted short-term investments	838	224
Domestic accounts receivable	7,661	21,649
Recoverable taxes	80,552	85,874
Prepaid expenses	1,457	11,517
Other assets	17,709	39,115
Noncurrent assets		
Court deposits	1,849,787	1,772,305
Recoverable taxes	76,741	76,688
Other assets	16,747	62,441
	2,051,526	**2,071,252**

(b) Liability exposure	Consolidated	
Current liabilities	**2018**	**2017**
Trade payables	(70,333)	(41,816)
Loans and financing and charges	(3,961,355)	(2,713,441)
Salaries and payroll contributions	(21,302)	(21,410)
Taxes payable	(240,199)	(169,966)
Other provisions	(2,753,486)	(1,738,352)
Other liabilities	(34,595)	(31,677)
Noncurrent liabilities		
Taxes payable	**(201,047)**	**-**
Provisions for contingencies	(113,526)	(123,456)
Deferred income tax	(2,268,230)	(1,597,310)
Dividends	(2,805,548)	(2,805,548)
Other provisions	(7,280,863)	(9,979,503)
Other liabilities – Related parties	(3,848,499)	(1,757,488)
Other liabilities	(76,604)	(95,233)
	(23,675,587)	**(21,075,200)**

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

(c) Exposure not recorded in the balance sheet:

	2018	2017
Tax proceedings		
Chance of defeat remote	(2,308,485)	(2,021,501)
Chance of defeat possible	(11,417,678)	(11,642,434)
Labor claims		
Chance of defeat remote	(5,121)	(7,356)
Chance of defeat possible	(415,132)	(199,529)

	2018	2017
Civil claims		
Chance of defeat remote	(8,805)	(7,181)
Chance of defeat possible	(1,114,457)	(936,994)
Environmental proceedings		
Chance of defeat remote	(2,470)	(2,207)
Chance of defeat possible	(1,132,733)	(1,001,884)

Summary of the exchange rate exposure	2018	2017
Exposure recorded in the balance sheet (a + b)	(21,624,061)	(19,003,948)
Exposure not recorded in the balance sheet (c)	(16,404,881)	(15,819,086)
Total net exposure	(38.028.942)	(34,823,034)

The Company does not hedge its assets and liabilities in Reais, in accordance with its internal guidelines. Foreign currency assets and liabilities are translated to the functional currency at the exchange rate as of the balance sheet date, with US$ 1.00 being equal to R$ 3.8742 at 31 December 2018 and US$ 1.00 equivalent to R$ 3.3074 at December 31, 2017.

(c) Liquidity risk

The liquidity risk arises if the Company does not have sufficient funds to honor its obligations in a timely fashion.

Company Management has faced challenges in its liquidity risk management due to the suspension of production operations following the failure of the Fundão dam, including defaulting on certain obligations in the Company's loan and financing agreements. The Company's liquidity in 2018 was maintained by resources provided by its Stockholders via the placement of private non-convertible debentures (Note 15).

The carrying amounts of the cash flows from financial liabilities are:

	Consolidated		
	2018		
	Amount	Up to 12 months	1 - 10 years
Suppliers/trade payables	76,455	76,455	-
Loans and financing	18,530,227	18,530,227	-
Financial charges payable	1,844,328	1,844,328	-

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The value of the undiscounted cash flows are as follows:

Financial liabilities	Consolidated				
	Carrying value	Contractual cash flow	2019		2020
			0 - 6 months	6- 12 months	
Trade payables	76,455	76,455	75,485	970	-
Loans and financing	18,530,227	18,530,227	18,530,227	-	-
Financial charges	1,844,328	1,844,328	1,844,328	-	-
Total	**20,451,010**	**20,451,010**	**20,450,040**	**970**	**-**

As explained in note 3 (f), in addition to these financial obligations in the table, there are those established under the TTAC, which affect the liquidity of the Company. It is important to note that, to the extent that Samarco does not have the funds to meet these financial obligations, each of its shareholders, Vale and BHP Billiton Brasil must do so, according to their 50% equity interest in Samarco.

30.4 Bank sureties

As shown in the table below, the Company has bank sureties from financial institutions issued for an indefinite term mainly to guarantee the suspension of mandatory collection of amounts demanded under tax enforcement proceedings in the total updated amount at December 31, 2018 of R$ 2,039,114 (R$ 2,149,070 at December 31, 2017). The total amount originally contracted is R$ 1,080,468.

Bank	Amount secured	Current amount	Index	Term
Bradesco	607,850	1,117,353	Selic	Indeterminate
Bradesco	27,956	41,823	VRTE	Indeterminate
Votorantim	100,948	187,983	Selic	Indeterminate
Itaú	276,052	625,930	Selic	Indeterminate
Itaú	67,662	66,025	IPCA-E	Indeterminate
Total	**1,080,468**	**2,039,114**		

30.5 Capital management

The Company administers its capital with a view to safeguarding liquidity, optimizing the use of capital while yielding sustainable returns for stockholders and benefits for other stakeholders.

In order to maintain or adjust the Company's capital structure, Management constantly monitors its debt levels, aligned with its dividends policy, which in turn follows stockholder guidelines.

Under normal operating conditions, the Company monitors and manages its level of financial leverage in accordance with market standards, its strategy and compliance with the financial metrics outlined in the loan agreements in the form of financial covenants (Net Debt/EBITDA). The Net Debt/EBITDA is a metric, which corresponds to the net debt compared to the cash generation of the Company, measured by the EBITDA. The net indebtedness, in turn, corresponds to the total of loans and financing (including short and long term loans, as shown in the consolidated balance sheet), subtracted from the total of cash and cash equivalents.

In 2018, with its operational activities still stopped, the Company was unable to meet its Net Debt / EBITDA covenant of 4:1 in all loan and financing agreements.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The calculation of the net gearing index considers net debt as a percentage of total capitalization. Total capitalization is calculated by summing consolidated net debt and stockholders' equity, as shown below:

	2018	2017
Total loans and financing	**20,374,555**	**16,181,280**
(-) Cash, cash equivalents, restricted short-term investments	(84,241)	(56,698)
Net debt – consolidated	**20,290,314**	**16,124,582**
Total stockholders' equity	(17,116,614)	(14,602,995)
Total capitalization	**3,173,700**	**1,521,587**
Financial leverage index	639%	1060%

In standard conditions, the analysis of these indicators is used to determine the working capital management to maintain the degree of leverage of the Company at levels equal to or below the leverage index considered adequate by management.

30.6 Fair value hierarchy

The Company considers fair value as the price that would be obtained from the sale of an asset or paid to transfer a liability in an arm's length transaction on the measurement date (sale price). The Company uses market data or assumptions that market participants would use to price the asset and liability, including assumptions about the risks in general and risks inherent to the inputs used in the valuation method. The Company mainly applies the market approach to measure fair value and makes every effort to use the best information available. The Company consequently uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The Company can classify the fair value balances based on observable inputs. The fair value hierarchy is used to prioritize the inputs used to measure fair value. The three levels of fair value hierarchy are as follows:

- Level 1. Active market: quoted price - A financial instrument is deemed to be quoted in an active market if the quoted prices are readily and regularly disclosed by a stock exchange or organized over-the-counter market by operators, brokers or market associations, by entities with disclosed prices by regulatory agencies, providing that these prices represent market transactions which take place frequently between independent parties, on an arm's length basis.

- Level 2. No active market: valuation method - A valuation/pricing method should be used to determine the fair value of an instrument which is not traded in an active market. Other criteria can be used, such as data on the current fair value of another similar instrument, discounted cash flow analyses and options pricing models. The valuation method aims to establish what the transaction price at the measurement date would be in an arm's length transaction.

- Level 3. No active market: equity instruments - Fair value of equity interests/equity instruments not quoted in an active market and underlying derivatives which should be settled by delivering unquoted equity instruments.

	Balance in 2018	Fair value hierarchy		
		Level 1	Level 2	Level 3
Restricted short-term investments	1,919	1,919	-	-
Loans and financing	17,783,863	7,497,124	10,286,739	-

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

The fair value of the financial liabilities related to loans and financing, with accounting balances measures at amortized cost, is calculated as shown below:

	2018		2017	
	Book value	Estimated fair value	Book value	Estimated fair value
Bonds (i)	9,696,246	7,497,124	7,933,482	5,393,737
EPPs (export pre payments)	6,716,954	6,348,052	5,534,357	4,692,074
Others	3,961,355	3,938,687	2,713,441	2,664,991
	20,374,555	**17,783,863**	**16,181,280**	**12,750,802**

(i) The fair value of the bond operations is obtained by listing the bond in the secondary market (using the closing value, as reported by Bloomberg);

(ii) For loan operations under the EPP (Export Pre-Payment) modality, debenture operations and other operations of less significant amounts, which are not disclosed in the secondary debt market, or for which said market does not present sufficient liquidity, the calculation of the fair value was also carried out based on the quotation of bonds on the secondary market.

Management understands that other financial instruments, such as accounts receivable and suppliers, which are recognized in the financial statements at their carrying amounts, do not present significant variations in relation to the respective fair values.

30.7 Sensitivity analysis

The Company's financial instruments consist of cash and cash equivalents, restricted short-term investments, accounts receivable, accounts payable and loans and financing.

The main risks facing the Company's operations are from changes in the LIBOR rate for long-term financing and IGP-DI for domestic operations.

In order to identify the sensitivity of the index for short-term investments, in Brazil and abroad, to which the Company was exposed as of December 31, 2018, three different scenarios were determined to cover the following 12-month period. Based on the accumulated IGP-DE accumulated index and the LIBOR rate valid for 06 months, in effect as of December 31, 2018, the Company defined a probable base scenario and two stressed scenarios: Scenarios II and III, with increases of 25% and 50%, respectively, over the base.

	Risk	Probable scenario I	Scenario II	Scenario III
Loans and financial investments abroad	Libor	2.8756% a.a.	3.5945% a.a.	4.3134% a.a.
Yields as of December 31, 2018		180,276	225,345	270,414
Loans and investments available in Brazil	IGP-DI	8.3823% a.a.	10.4779% a.a.	12.5735% a.a.
Yields as of December 31, 2018		577	721	865

The simulation considers the balance of the respective debts (in US dollars and in local currency) at December 31, 2018, with repayment only at the end of the period.

In order to identify the sensitivity of the changes in foreign currency to which the Company was exposed as of December 31, 2018, three different scenarios were determined for the assets and liabilities, in which Scenarios II and III entail an exchange-rate decrease of 25% and 50% respectively, based on the first, called probable scenario I.

AT DECEMBER 31, 2018 AND 2017 (ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED)

Financial liabilities	Exposure (R$)	Probable Scenario (USD)	Scenario II (USD)	Scenario III (USD)
Exchange rate - (Risk - R$ / US$)	-	3.8742	2.9057	1.9371
Total Assets	2,051,526	529,535	706,047	1,059,071
Total liabilities	(23,675,587)	(6,111,090)	(8,148,121)	(12,222,180)
Net exposure in Reais recorded in the balance sheet	**(21,624,061)**	**(5,581,555)**	**(7,442,074)**	**(11,163,111)**

31. CREDIT QUALITY OF FINANCIAL ASSETS

The credit quality of the financial assets is evaluated by referring to the independent credit ratings (if applicable), and/or historical information about the levels of counterparty default with regard to the Company, specifically with regard to the length of the existing relationship and the level of default. Below are some of the elements used by management in the evaluation of the expected loss of its financial instruments, pursuant to CPC 48.

31.1 Cash and cash equivalents

	Parent Company		Consolidated	
	2018	2017	2018	2017
Current account and short-term bank deposits				
Investment Grade	79,981	55,568	82,322	57,473
	79,981	**55,568**	**82,322**	**57,473**

This category includes current accounts and short-term investments at banks.

31.2 Trade accounts receivable

	Parent Company		Consolidated	
	2018	2017	2018	2017
Counterparties with independent credit rating (S&P)				
Investment Grade	-	-	7	7
Counterparties without independent credit rating (S&P)				
Group 1 - clients with relationship of up to five years	1,592	1,362	1,602	1,371
Group 2 - clients with more than five years without history of default	-	10,235	-	10,235
Group 3 - clients with more than five years with little history of default	10,246	6,691	10,246	6,691
Group 4 - domestic clients not purchasing iron ore	7,661	21,649	7,661	21,649
	19,499	**39,937**	**19,516**	**39,953**

32. INSURANCE COVERAGE

In order to partially mitigate risks and given the nature of its operations, the Company maintains several different types of insurance policies. The policies are in line with the risk management policy and are similar to the policies taken out by other companies in the same line of business as Samarco. The coverage of these policies includes operational risk of material damages and loss of earnings, domestic transportation, international transportation, life and personal accident insurance, vehicle fleet, civil liability insurance, all risks, surety bonds and others.

The Civil Liability policy for the inactive plant expiring on April 11, 2019, is in the process of being renewed with the insurance market. The coverage of (i) sudden pollution and (ii) dams, due to the incident occurred, were excluded from the current policy.

Since 2017, Samarco has in place a financial guarantee insurance in compliance with the terms of the Framework Agreement – TTAC, signed with the Public Prosecution Service at the 12th Federal District of Belo Horizonte, MG, to assure payment of the amounts corresponding to the court deposits that the purchaser needs to make as a result of default on the obligations of funding for the Socioeconomic and Socioenvironmental Remediation programs in response to the damages arising from the failure of the Fundão dam, as per the case records of the public civil action nº0069758-61.2015.4.01.3400 (the ACP), brought against the Insured by the Federal Government, Agência Estadual de Recursos Hídricos - AGERH, Agência Nacional de Águas - ANA, Departamento Nacional de Produção Mineral - DNPM, Estado de Minas Gerais, Estado do Espírito Santo, Fundação Estadual de Meio Ambiente - FEAM, Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA, Instituto Estadual de Florestas - IEF, Instituto Estadual de Meio Ambiente e Recursos Hídricos - IEMA, Instituto Mineiro de Gestão das Águas - IGAM and Instituto Chico Mendes de Conservação da Biodiversidade, among others. Indemnity payments by the Insurer will be made on equal conditions with other insurance policies submitted in the case records.

In addition, Samarco maintains a Directors and Officers Liability Insurance, in effect until March 10, 2019, which is in the process of being renewed. This insurance covers members of the Board of Directors, Executive Board, Supervisory Board and any other body mentioned in the Bylaws, as well as certain employees at the management and strategic levels, in both the Company and its parent Companies (collectively referred to as the "Insured"). The policy covers financial losses resulting from claims against the Insured for acts or omissions in the exercise of their functions of employment. It also covers agreements previously authorized by the insurer for the purpose of bringing to a close judicial or administrative suits and coverage for payment of defense costs of the Insured, if and when incurred.

The operational risk insurance is suspended due to the temporary interruption of Samarco's operational activities. However, the Company maintains a relationship with the market with regard to asset security, so that as soon as the Company receives the necessary authorizations it will be able to reestablish the purchase of insurance for its operational activities and potentially the loss of income and/or profit.

33. SUBSEQUENT EVENTS

On January 29, 2019, the Secretary of State for the Environment and Sustainable Development of Minas Gerais ("SEMAD"), through resolution No. 2,762, determined the suspension of ongoing environmental regularization analyses related to the tailings disposal activity in dams regardless of the construction method, until the new rules are published by the competent bodies.

On January 30, 2019, a joint resolution SEMAD and the Environmental Foundation (FEAM) - No. 2,765 - was published, which determines the decommissioning of dams using the upstream raising method in Minas Gerais.

On March 21, 2019 a Joint Resolution of SEMAD/FEAM no. 2,784 was published, requiring the decommissioning within three years of all of the tailings and waste containment dams raised by the upstream method, related to mining operations. As determined by this resolution, by May 25, 2019 Samarco will submit to FEAM its timetable for this decommissioning. Article 15 of this same resolution revokes SEMAD Resolution 2,762 of January 29, 2019 and Joint Resolution SEMAD/FEAM 2,765 of January 30, 2019.

The Company is evaluating the possible impacts of these resolutions on the processes of Corrective Operational Licensing (LOC), Alegria Sul Pit Tailings Disposal System and of the Germano dam, and its business plans. The Company is in the process of determining the financial impact of this resolution and cannot yet provide a reliable estimate.

BOARD OF DIRECTORS

Serving members
Paulo Fernando Teixeira Souto de Souza
Fabiano de Carvalho Filho
David James Crawford
Ivan Malekzadeh Fadel

Alternates
Luis Fernando Madella Athayde
Juan Franco Merlini
Atif Nazir Janjua

EXECUTIVE BOARD

Rodrigo Alvarenga Vilela
CEO and Operations and Infrastructure Officer

Cristina Morgan Cavalcanti
CFO

ACCOUNTANT RESPONSIBLE

Lucas Brandão Filho
Accountant - CRC-MG 046442/O – TES